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THE TREATMENT OF REMITTENT AND INTERMITTENT (MALARIAL) FEVERS.*

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In this symposium by Southern authors, on "The Treatment of Remittent and Intermittent Fevers," I presume that we are expected to discuss the methods of treating malaria that are actually employed in our every-day practice. I shall therefore give simply my personal experience in treating those conditions, and will consider the etiology, pathology, and symptomatology of the different forms of malaria only in so far as is necessary to outline their rational treatment.

In discussing the prophylactic treatment of malaria, I shall confine myself to individual prophylaxis, and will not mention the various methods of destroying the malaria-bearing (Anopheles) mosquitoes. If the individual can avoid being bitten by infected mosquitoes, he of course escapes the disease; and in localities infected with malaria it is advisable for every one to sleep under mosquito bars or in carefully screened houses from early spring until winter has well begun. The patient suffering from malaria in any form should by all means be placed under a mosquito bar as soon as the diagnosis of malaria is suspected, and kept there until he is free from every symptom, in order to avoid infecting the mosquitoes already in the home.

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The physician should consider it just as much a duty to instruct a family, when one of its members is infected with malaria, regarding the methods to be employed to prevent others from becoming infected, as he does when a member of a family has tuberculosis or typhoid fever. I am quite sure that the doctrine of the mosquito origin of malaria, which is becoming accepted by the laity as well as by practically all progressive physicians, has been the means of lessening the prevalence of malarial diseases all over the civilized world.

The value of quinine as a prophylactic in malaria is as great as when it is used for its specific effect after the disease has been contracted. From 3 to 5 grains (0.18 to 0.3 gramme) taken night and mornings will almost centainly give protection from malaria.

The Italians use as a prophylactic for malaria the fluid extract of lemon; and there is a prevalent idea among the laity in this section of the South that the juice of a lemon in a goblet of water, taken before breakfast, will prevent malaria when one is in a locality where he is exposed to the infection. If there is any virtue at all in this method it is probably due to the tonic, laxative, and cholagogic effect of the lemon juice. My observation has been that the well nourished individual who is in perfect physical condition is but slightly susceptible to malaria, which seems to seek for its victims principally those who are weakened or prostrated from other causes; hence it is advisable for every one in a malarial locality to employ a liberal diet, and to use other means of keeping his vitality and strength up to the highest normal point. Since the person who has had malaria is peculiarly susceptible to recurrences, it is advisable to give him prophylactic doses of quinine, with iron, arsenic, and other tonics, to build him up as rapidly as possible. In some cases it is necessary for a change of climate before the patient's health is completely restored.

I am quite sure that all clinicians who have had such experience in treating intermittent and remittent fevers will agree that quinine is our safest and most reliable antimalarial remedy, but I am convinced that it is one of the most abused drugs ever in use; and were it not in the great majority of cases a harmless agent, untold damage would result from the indiscriminate and haphazard use of quinine by the laity, and even by the medical profession, in the South. There are many persons, however, who do not tolerate quinine well, and there are certain conditions, as in typhoid fever and tuberculosis, where quinine deranges the stomach, thereby interfering with nutrition, and also increases or intensifies the nervous manifestations of those diseases; so that, unless the malarial organisms have

been seen in the blood, I do not think we are justified in following the plan employed by many physicians in fevers of uncertain origin —i.e., giving heroic doses of quinine for days, or even weeks, to exclude or assert the diagnosis of malaria. If the administration of quinine in antimalarial doses for forty-eight hours does not materially affect the fever in the great majority of cases, it is due to other causes than malaria; though there are occasional cases, one of which I will report later in this article, where quinine alone, even if administered for weeks continuously, will not destroy the plasmodium.

The microscope is almost indispensable for the rational treatment of many cases of malaria fevers—certainly to those who are accustomed to frequently rely upon the microscopic examination of the blood for demonstration of the malarial parasites before administering quinine even in small doses. In infected localities, however, the diagnosis of the tertian and quartan (intermittent) forms of malaria can be made practically with certainty at the bedside, from the symptoms alone, and the treatment begun at once; but in the atypical forms of those types, and in estivoautumnal infection (remittent fever), the diagnosis is often a matter of conjecture without examination of the blood. In the severe forms of either intermittent or remittent fevers, even if the diagnosis is not absolutely certain, the quinine should be administered at once without waiting for microscopical test, because a delay in those cases may prove fatal, and we cannot afford to subject our patients to the risk of such delay, even for the sake of scientific exactness.

I am aware of the fact that some of the best authorities on malaria argue that the best time to get the specific effect of quinine in the tertain, quartan, and other intermittent forms of malaria is at the close of the paroxysm, when the vitality of the protozoa is said to be the least, and just before the paroxysm, when sporulation takes place. I have tried to follow this practice, but in some way I would be mistaken as to the time when those phases in the life cycle of the hematozoa take place, and there would be a recurrence; so I adopted the plan of giving the quinine in doses of from 3 to 5 grains (0.18 to 0.3 gramme) every three or four hours, as soon as I make the diagnosis of malaria; and whether the fever is low or high, give the quinine until the fever subsides, continuing it for a few hours after the expected paroxysm—and my results have been much more satisfactory. If I am called in during the cold stage (chill), or while the fever is at its height, and the nervous symptoms—i.e., headache, backache, etc.—are severe, I sometimes administer a sedative hypodermically, morphine 1-8 to 1-4 grain (0.008 to

0.015), with atrophine sulphate 1-150 grain (0.0004), but give the quinine at the same time. It is to be remembered that when quinine is given by the mouth it requires several hours to get its full effects, and it does not therefore add to the discomfort of the patient, as some claim, to give the quinine during the stage of pyrexia. If there is constipation I give a purgative, preferably calomel, 3 to 8 grains (0.18 to 0.5), combined with bicarbonate of sodium, podophyllin, and extract of hyoscyamus. Some physicians in this section always give an initial calomel purge before beginning the quinine, but I have not found it necessary except in cases where there is constipation, coated tongue, etc., though I believe that it is always advisable to keep the bowels and kidneys performing their eliminative functions, as the intestinal toxemia, which is coincidental with the other manifestations of the malaria explosion, unquestionably adds to the severity of the symptoms, and for that reason I usually combine with the quinine, salol 3 to 5 grains (0.18 to 0.3). I have also used with excellent success saloquinine, a new salt of quinine, which is chemically defined as the salicylic-acidester of quinine. I do not think that this latter preparation has any advantages over the combination of salol and quinine, except that it is nearly tasteless. The dose of saloquinine is from 15 to 20 grains (1.0 to 1.2) every four hours, until the antimalarial effect is obtained.

Because of the severe headache, backache, and general discomfort which accompany nearly all malarial fevers I frequently give a sedative, codeine sulphate 1-4 to 1-2 grain (0.016 to 0.03), with phenacetine, or ammonol, 2 1-2 to 4 grains (0.15 to 0.25). I desire it distinctly understood that I do not give the latter drugs for their antipyretic effect, only as analgesics.

During the stage of hyperpyrexia I have the patient sponged with cold or tepid water, and sometimes placed in a cool or even cold bath, because it makes him more comfortable. While I am not quite a believer in the theory that fever in malaria is a conservative process, an effort on the part of nature to oxidize the toxines of the disease, I am convinced that the fever, per se, in malarial diseases is never the cause of serious destructive changes, as is usually taught. As I view it, the fever is simply one of the resultant manifestations of the malarial toxemia, just as are the other symptoms, and while it is a good index, as a rule, to the degree of toxemia, it is really the latter that does the damage. I therefore do not think that we are ever justified in administering cardiac depressants with the view of "reducing fever;" and while I am a great believer in the therapeutic effect of cold water in malarial and other fevers, I do not regard its antipyretic effect as being the one most desired.

The following is a favorite formula, and one with which I have cured many cases of malaria, both the intermittent and remittent forms:

℞ Quinine sulphatis, or hydrochloratis, grs. xl vel ℥j (2.5-4.0),
Salolis, grs, xl vel ℥j (2.5-4.0);
Codeine sulph., grs. iij (0.18);
Phenacetine, grs. xxx vel xl (2.0-2.5).

M. Ft. in caps. No. xii. S.: One capsule every three or four hours.

To insure solution of the capsule and quinine in the stomach, I sometimes followed each capsule with 10 minums of dilute hydrochloric acid. In cases where I desire a quicker effect, or where large capsules cannot be swallowed, I employ the Johns Hopkins Hospital method of giving the quinine in solution, though many people object very much to the taste of quinine, and physicians in general practice sometimes have to consider the desires of their patients by giving medicines in as palatable form as possible. The following formula, having the quinine in solution, is not very unpalatable, and contains the aromatic stimulant and sedative as employed by our surgeons in the Spanish-American war, and which cured many cases of the Cuban fevers where the quinine alone failed.

℞ Quininae sulphatis, grs. l vel lxxx (3.12-5.0);
Acidi hydrochlor. dil., f℥jss vel ijss (5.62-9.37);
Tr. zingiberis, f℥ijss vel iv (9.37-15.00);
Tr .opii camph., f℥ij vel iv (7.50-15.0);
Syr. limonis, f℥ij (59.20);
Aquae, q. s. ad f℥viij (236.0).

M. S.: Tablespoonful every four hours. Take through a straw. With children I sometimes suspend the quinine in some of the aromatic syrups, as yerba santa, in a chocolate syrup, which disguises the taste of quinine to a great extent. If the syrups are objectionable because of a derangement of the stomach, I prescribe the bisulphate in solution, or saloquinine, which is nearly tasteless.

In the remittent (estivo-autumnal) forms of malarial fever there is usually constipation, and unless the symptoms are grave I begin the treatment with small doses of calomel, 1-4 to 1 grain (0.016 to 0.065) every hour until bowels have acted thoroughly. In some cases I follow this with a saline. I then begin the quinine in from 3 to 5 grains (0.18 to 0.32) every three or four hours, continuing it without regard to the height of the fever until the temperature is normal, when the intervals between doses are increased to six hours, after

which the quinine is continued in tonic or prophylactic doses until there is no probability of a recurrence of the infection.

In the comatose, congestive, or other malignant types of malaria, it is sometimes advisable to administer the quinine hypodermically. For this purpose I employ a sterilized solution of the bisulphate or the hydrochlorate, though it is rare in my practice that I see the malignant types of malaria.

Twenty-five years ago the so-called hemorrhagic malarial fever, or malarial hematuria, was one of the most frequent and fearful diseases in this country, but since then it has been gradually disappearing until it is one of the rarest diseases. So far as I can learn there have been only two or three cases in the county within the past eight years. I have had the good fortune to have seen only four cases, all of which occurred nine years ago—during my first year of practice. All four of these cases had had large doses of quinine to cure an attack of "biliousness," or to prevent an expected "chill." In one of these cases, in which I was called to consult with a physician in the western part of the county, the patient's urine had very nearly cleared up, but as he had some fever I insisted upon his having more quinine. The attending physician, who had considerable experience with "yellow disease," as the natives call it, objected on the ground that the quinine would cause a recurrence of the bloody urine, but yielded to my suggestion, and the quinine was given. In six hours there was a return of the hemoglobinuria, and more severe than the first paroxysm. The physician continued to treat the case without quinine, and the patient made an uninterrupted recovery. I have had so little experience with this form of malaria—if it be of malarial origin—that I will not attempt to outline any treatment; but the four cases which I have had convinced me, not only that the quinine would do no good and is not indicated in the treatment of the disease, but that in the majority of cases, if not in all, the quinine is the exciting cause of the breaking down of the red blood-corpuscles, with the consequent hemoglobinuria.

From the foregoing remarks it is clear that I consider quinine the drug par excellence in the treatment of nearly all forms of malaria, but unfortunately I have to treat many people who have a marked idiosyncrasy for that agent. I have seen persons in whom even small doses of quinine would produce great discomfort and even alarming symptoms, such as severe tinnitus aurium, nausea and vomiting, urticaria, or even marked depression; in others small doses can be tolerated, but not in sufficient quantities to destroy the plasmodium. In such cases, where these unpleasant effects cannot be

prevented by the use of the bromides, etc., we are compelled to use the more unsatisfactory and less certain substitutes for quinine. Of these I get the best results from methylene blue in two grain doses (0.13) every three or four hours. I usually give it in capsule with powdered nutmeg and small doses of codeine, which seems to prevent the strangury and nausea which sometimes follow the use of the methylene blue when given alone. I have used methylene blue in a large number of cases of malaria, and I know that it has marked antiperiodic powers, though it is not as certain in its effects as quinine. In those cases where the "untoward effects" of quinine are not so marked, but sufficiently so to prevent its use in large enough doses to obtain its full antimalarial effect, I combine the methylene blue, grain i (0.065), with quinine sulphate, grains ij (0.13), with excellent results. In some cases, where the sulphate or hydrochlorate is not tolerated, the other alkaloids of cinchona are well borne. I have seen a number of persons who were always very unpleasantly affected by quinine, but who could take some of the proprietary "chill tonics," which are said to contain amorphous quinine, in such doses as to get their antiperiodic effect. Salicin has some reputation as a substitute for quinine, and I have used it in a few cases, but to get specific effect the doses have to be so large, 15 to 30 grains (1.0 to 2.0), that in some cases it is not well tolerated by the stomach. Phenocoll hydrochloride, in daily doses of from 20 to 30 grains (1.5 to 2.0), is said to be another excellent substitute for quinine in the intermittent forms of malaria.

One who has not made frequent microscopic examinations of the blood in malarial diseases can hardly realize the marked and even grave changes that take place in the blood in a very short time. The blood count and hemoglobin test do not tell half the tale of the destruction of the red blood cells—indeed, it is almost unnecessary to make these tests, as a glance at the irregular sizes and shapes of the erythrocytes (poikilocytes), as well as the fragments of the red blood cells, is sufficient indication to the busy practitioner that iron and arsenic are demanded.

In some cases, particularly the chronic forms of remittent (estivo-autumnal) fevers, with enlarged spleen, etc., the quinine does not seem to have its specific effect until the anemia has been partially overcome. The following case, briefly related from memory, illustrates this point, as well as the fact that all continued fevers that do not respond to the use of quinine in a few days are not typhoid:

Girl, aged fourteen. Was brought from a neighboring county to me for treatment on June 21. History of having had fever for

three or four weeks. Temperature 102° F., pulse 120, very anemic, enlarged spleen, etc. Microscopic examination of a fresh blood smear showed large numbers of hyaline, crescentic, and extra-corpuscular forms of the estivo-autumnal parasite. Apparently no leucocytosis, but the white blood cells were heavily pigmented. Marked poikilocytosis, with many fragments of red blood cells, and other evidences of a severe hemocytolysis. Because of lack of time no blood count or hemoglobin test was made. Patient placed on full doses of quinine, iron, and arsenic. Fever continued, but general condition of patient improved. Quinine discontinued on fifth day, but iron and arsenic were continued. On the seventh day another examination of the blood was made, which showed numbers of the parasites present, but there were less evidences of anemia. She was then given quinine in solution, 4 grains (0.25) every three or four hours for five days, and two days after the quinine was left off another examination of the blood was made, which demonstrated the presence of a few parasites, but the blood-corpuscles were more nearly normal. She was so much improved that she was carried to her home, but the quinine was continued another week, and the arsenic and iron, with quinine in tonic and prophylactic doses, were continued for another month. She made a slow but certain recovery, and a few weeks ago I learned that she was in fine health.

For the treatment of the anemia following both the intermittent and remittent forms of malaria, the so-called "malarial cachexia," the following formula has given me excellent results:

℞ Qnininae sulph., ℥jss (6.0);
Ferri redacti, ℥j (3.9);
Ext, nucis vomicae, grs. viij (0.52);
Acidi arseniosi, gr. j (0.065);
Ext. colocynth. com., grs. x vel xv (0.65-0.97);
Podophyllini, grs. j vel iij (0.065-0.19).
Mellis, q. s.

M. Ft. in pilulae No. lx. S.: One pill after each meal.

Many people have the idea that negroes are but slightly susceptible to malaria, but I am convinced, for many reasons, at this time, that they are even more susceptible to malarial fevers than are the whites, and I think I can give statistics showing that I have excellent grounds for such an opinion. Of course malaria is essentially the same disease in the negro as in the Caucasian, but there are certain differences in its manifestations in the two races, that variations in treatment are often necessary. I had intended to discuss these differences in this article, but I fear that I have already taken

up more than the space allotted to me; but in the near future I will prepare a paper entitled "Malaria in the Negro," in which I will go into detail on that greatly neglected subject.

PUERPERAL ECLAMPSIA.

By E. B. WARD, M. D.,

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While we know that puerperal eclampsia is a disease sui generis, complicating pregnancy and the puerperium nothing is positively known as to its etiology. Various theories have been advanced and much has been written, but "the last word has by no means been spoken on this subject." There is a promising field of research here, and the future may develop something definite. That women are more nervous and susceptible to peripheral irritation during pregnancy, there can be no doubt as their reflexes are exaggerated and the subcortical centres respond more readily to stimuli of what ever origin during pregnancy than at other times. The clinical history of puerperal eclampsia is a classical picture, once seen, is not soon to fade from one's memory. Who is there among us that has not found out from sad experience that this fearful storm will sweep over a patient sometimes without the slightest warning. There may be the clear, bright noontide glory of a spring day, as it were, all may be sunshine and everything may be going on well with the patient. Bright and happy and all expectant over the prospects of an early maternity, blissfully ignorant of the ordeal awaiting her, she enters the period of her accouchment without fear or solicitation. Not a cloud is in sight, all is so serene and promising that the accoucher himself is lured into a sense of security. But, lo! the scene begins to change, on the horizon a small cloud appears in the form of increased nervousness, headache, gastric disturbances, and slight nervous twitchings, just as the leaves and twigs are gently swayed on the trees by the first breath of the rising winds. Soon the storm breaks over her, and like a ship tossed upon the wild waves, she is a victim of its unrelenting fury, with every fibre vibrating under greatest tension she is tossed to and fro helpless and at the mercy of the storm. At such times we do not concern ourselves so much as to the cause, 'tis the effect that holds us spellbound and makes us tremble with responsibility. We are at such times looked upon truly as pilots to guide the frail barques through the troubled waters to a harbor of safety.

Although the pathogenesis of puerperal eclampsia is still uncertain it is interesting to briefly review the various theories advanced as to its etiology. But after all we will be no nearer to the solution of the problem than were our forefathers when they claimed that two causes gave origin to this trouble. Intra renal, due to diseased kidney; and extra-renal, due to pressure on the renal veins, inferior vena cava or ureters. As the urine of eclamptic patients was found to contain albumen in large quantities this gave rise to the renal theory then advanced. But further investigation revealed the fact that albumen was not constantly or always found at such times, the albuminuria was then thought to be secondary, the effect and not the cause. That it was the result of the direct action of a poison on the renal epithelial cells, in the effort at elimination by the kidneys. The theory of Traube and Rossentein was that pregnancy produced a hydraemia of the blood and this resulted in an acute cerebral anaemia. Another writer claimed that as acetone was discovered in the urine of eclamptic patients it naturally figured as an etiological factor. All of these theories have failed to be substantiated. The more modern investigators attempt to solve the question with the auto-intoxication theory, toxaemia, but what these toxins are is yet unknown. They do not lean entirely upon the renal origin alone, but claim deficient elimination accounts for the accumulation of the toxins in the blood which act as complex irritant poisons to the motor areas of the brain; deficient elimination not alone of the kidneys, but of the liver, skin, lungs and intestines. By some the toxins are considered a ferment supposed to be the product of metabolism. The later theory of Veit is that eclampsia is caused by the cytotoxins produced by the chorionic cells becoming detached and gaining entrance into the circulation. Some writer has truthfully expressed it when he said that "we are in the matter of eclampsia ignoramus et ignorabimus."

TREATMENT OF ECLAMPSIA.

There is no certain specific for puerperal eclampsia, some cases will survive under very little treatment, while on the other hand, others will succumb in spite of the most assiduous attention and the best treatment. Every case is not alike, and remedies which exert a favorable influence upon some exercise little or no impression upon others. For the matter of convenience I will classify the treatment under three heads: (1) Prophylaxis; (2) Treatment of the Convulsions; (3) Treatment during the intervals.

PROPHYLAXIS.

This treatment should commence with the beginning of pregnancy. And its success is due to our watchful care of the patient from the inception of pregnancy to the close of the puerperium. Regulate the pregnant woman's habits, diet, and sleep, cut down the amount of nitrogenous food. Keep the eliminating organs and functions as near the normal as possible. Upon perfect elimination depends the absence of excessive accumulation of leucomaines. We readily see then the importance of keeping the bowels open and empty, "It not only sustains the eliminative function, but permits the uterus to occupy the abdominal space with less interference with the work of the kidneys, ureter and heart." Copius saline enemas are most valuable for flushing the bowels, I have no choice in the matter of purgatives, usually letting the patient select the one most to her liking. The most important point under the prophylaxis of eclampsia is the systematic examination of the urine during pregnancy. In making this examination bear well these points in your memory, that the simple examination for albumen alone is not sufficient, for I have already mentioned that this agent is not invariably present at such times and its presence or absence does not count for all in the production of eclampsia. "In the excretion of urea we have the most valid index of solid excretion. This is never as great in amount in the pregnant as in the non-pregnant and an increase in the toxic symptoms is almost invariably preceded by decrease in the urea percentage."

Always examine for urea, and measure the quantity of urine passed in during the twenty-four hours, and do not omit to observe the specific gravity. As to the frequency of the urinary examinations you are to be governed by circumstances and symptoms presenting. We are given warning by the headaches, nausea, indigestion, etc. In other words "watch not only for the physical signs of pronounced renal inadequacy but also for the general symptoms of the over-charge of the blood with toxic material."

TREATMENT OF THE CONVULSIONS.

We are all familiar with the usual remedies used at this time. I do not hesitate to use chloroform by inhalation for the relaxation of the patient and control of the paroxysms. With this I always administered morphia with atropia hypodermically. The ice bag to the head is also of benefit. At this stage I also administer chloral and bromide per rectum, if necessary to control the convulsion. I am not favorably inclined to the hypodermic use of pilocarpine. I have used it and had a very troublesome bronchorea result. The patient

is generally prone to pulmonary oedema at such times and pilocarpine intensifies it.

TREATMENT DURING THE INTERVALS.

At this stage choral and bromide is most valuable, keep the patient under its influence so long as there are convulsive symptoms. The old authorities advised blood letting and some modern writers do so yet. I am not favorably inclined to this procedure, I much prefer to administer veratrum hypodermically in ten to twenty drop doses repeated at hourly intervals or oftener until the pulse is brought down to sixty. If I can keep my patients' pulse down in the neighborhood of sixty I feel safe. My experience with veratrum subcutaneously is very encouraging and I will continue to use it. The last and most important question to answer in the treatment of these cases is, shall we proceed to empty the uterus, or shall we wait? Authorities differ about this. In my opinion we should be governed by the existing conditions. If the pregnancy has progressed beyond the seventh month and the convulsions fail to respond to the medicinal treatment, unless you wish to lose your patient, you had better empty the uterus as rapidly as consistent with safety to the mother. If as is now believed by some, that the toxemia is due to foetal metabolism, this source of peripheral irritation should be removed as soon as possible. If the labor has reached the second stage immediate emptying of the uterus is the proper course to pursue, and if necessary apply forceps and deliver without delay. If necessary to dilate the cervix use the fingers where practical, exercising of course most rigid asepsis, when manual dilatation is inadequate proceed to forcible dilatation with metal dilators. Bossi's dilator is highly recommended by some writers. I have had no experience with them. In all grave cases hypodermoclysis is a most valuable adjunct to your treatment.

ADDRESS OF W. H. WILDER, M D., PRESIDENT JEFFERSON COUNTY MEDICAL SOCIETY.

The term of office as President of this Society, to which by your suffrage I was elected one year ago, is now about to expire, and it has very properly become one of our unwritten laws that the honors of being elected and serving as president of this organization comes to one only once in a life time. This seems to me to be a very good general working rule, and I am sure should and does make the members strive to so conduct themselves as to be held worthy of that high honor. It has also very wisely become another unwritten law

of this Society that no one can be elected to a purely honorary position in it who personally solicits the support of its members. Therefore I trust you will not think it improper for me to say I was proud to be elected, like my predecessors, wholly without any solicitation on my part. The honor of the election was therefore most highly appreciated; I thanked you for it at that time, also promising you the best efforts of my head and heart to make 1903 a successful year in the history of the Jefferson County Medical Society.

Article 21, Section VII of the Book of the Rules in speaking of the duties of the presidents of county medical societies says: "He (the president) shall, at the close of his administration, at the regular meeting for the election of officers, submit to the Society an annual message, devoted to an account of his stewardship, and to the discussion of the interests, objects and business of the Society."

Just how faithful I have been to my stewardship and how well I have fulfilled the promise at the time of my election is not for me to say; but, without appearing to be egotistic, I feel safe in saying that this Society has enjoyed a period of unusual prosperity during the year now closing.

With a view of stimulating more interest in the work of the Society, at the beginning of my official term, I had sent to each member a self-addressed return postal card requesting him to promise to write a paper or report in writing one or more interesting cases during the year; not more than 15 per cent. of these cards were ever returned; in addition to the above, I made numerous earnest personal appeals to members to write papers; in fact I have been so persistent along these lines I fear I have overtaxed the patience of some of our members. I am sure that the thirty-one papers read before this Society this year are more than have ever been read before it in a similar period of time; I believe I am safe in further stating that the general average of these papers was better than in former years.

In the beginning of my term I made special effort to increase our membership; this effort has been kept up throughout the year, so that tonight the secretary's report shows a membership of 180, and a net gain of forty-six during the year. This is by far the largest membership this Society has ever had, and places it as one of the largest local medical societies in the South. I think I am also safe in saying that our enthusiasm, as well as our membership, is at the high water mark. This is clearly shown by the fact that our average attendance for 1903 is greater than in any previous year.

During the past twelve months that grim reaper, death, the common leveller of man, has not failed to make his usual sad visits

to our ranks, and has claimed two of our oldest and most prominent members, both ex-presidents of this Society and both councillors in the M. A. S. A.

On Feb. 24, 1903, the life of Dr. W. E. B. Davis was crushed out under the cruel wheels of a railroad train; he had nearly all of his professional life been one of the most active members of this Society, having at various times held every office in it except secretary. Dr. Davis was one of the leading exponents of surgical thought in this county, and ranked high in the councils of the profession; his great love and enthusiasm for his chosen specialty was almost contagious, and doubtless has inspired many of his confreres to higher and better work.

A called meeting was held in this hall on the evening of the day of his death to make arrangements for attending his funeral which was held from his late residence on Feb. 27, 1903, and was attended by a large number of our members in a body.

At the next regular meeting, March 9, 1903, which had at the preceding called meeting been set aside as a special memorial meeting, Dr. R. M. Cunningham, the life-long friend of Dr. Davis, read a most beautiful tribute to his memory. Many others added appropriate remarks on that occasion. Thus has passed away one of the most useful members this Society has ever had.

On June 2, 1903, after a long and tedious illness of nephritis with cardiac complications, Dr. A. T. Henley died at his home in this city. He was a typical old school southern gentleman, broad and liberal in his views, and universally beloved by the members of this Society to which he had continuously belonged for more than twenty years; he was on the board of censors at the time of his death.

A called meeting was held on June 3, 1903, to make arrangements to attend his funeral, which was held next day, and was attended by a large number of our members. At the first regular meeting of the Society in June, which had at the called meeting been designated as a memorial meeting, Dr. Geo. S. Brown, the close personal friend of Dr. Henley, read a beautiful memorial address, such as only Dr. Brown could write, setting forth many beautiful and lovely attributes of character of the deceased. Many others took advantage of this opportunity to say words of praise to the memory of this much loved member.

To both the funerals of our deceased members the Society sent beautiful floral tributes.

Dr. Mack Rogers was appointed on the Cochran Memorial Committee to fill the vacancy made by the death of Dr. Davis.

Drs. J. D. Heacock and E. A. Jones were appointed delegates to the M. A. S. A., which met in Talladega on the third Tuesday in April; they represented, at that time, a society of 164 members; the previous year our report showed 131 members. This Society now has more than three times as many members as any other County Medical Society in the State.

At the first meeting of the Society in May the supervisor of medical examinations made complaint that some of the members of the Board of Censors were direlect in furnishing examination questions and grading papers; this matter was referred to the president for investigation with instructions to report back to the Society. I called the Board of Censors and the Supervisors together, and after hearing from them reported to the Society at its next regular meeting, when a very complimentary resolution was passed thanking the Board of Censors and the Supervisors for what they had done in the past and expressing confidence in them for the future. Affairs here took a very happy turn, and have worked very smoothly since, and our Censors continue to do that very efficient, faithful and high-class work which has always characterized their every act.

On June 22, 1903, after due and legal notice of an election, Dr. Parke was chosen a Censor to fill the unexpired term of Dr. Henley.

At the first meeting in July, after a spirited contest, Dr. J. S. McLester was elected city bacteriologist, an office created by the City Council at the urgent solicitation of this Society; but after creating the office they failed to appropriate any salary thereto, consequently we are still deprived of that very much needed officer's valuable services. We should not be content to let this matter stand as it is, but in justice to ourselves and to the public, should persist until we get a reasonable salary fixed for Dr. McLester.

On account of ill health Dr. E. A. Jones, our efficient secretary, tendered me his resignation on July 3, 1903; after careful deliberation I appointed Dr. A. W. Sims to that position until the Society could legally choose a secretary. Due and legal notice of an election was given, and on July 27, 1903, this body ratified my appointment by almost unanimously electing him to the position. I feel it both a duty and a pleasure to say that Dr. Sims has made and is still making the best secretary this Society has ever had.

On Sept. 14, 1903, Dr. E. P. Riggs handed me his resignation as a member of the Board of Censors; it was accepted reluctantly by the Society and legal notice of an election to fill the vacancy at the next meeting was given; on Sept. 28, 1903, Dr. F. A. Lupton was elected to fill the unexpired term.

It is quite right and proper for us to get into our membership all eligible material, especially the young doctors who come to our city, and also to cultivate a high class of medical and surgical papers before our Society; but we must not forget that we are too apt to forget our general and social affairs; the former with us have usually been relegated to our very efficient Board of Censors, who under its faithful, wise and careful chairman, Dr. Sholl, may always be depended upon to do whatever is best for our general good. The social side of our work, while not wholly neglected, has probably not received that attention we should give it. Early in the year we had our annual banquet at the Metropolitan Hotel; it was attended by quite a large number of our members and was very much enjoyed by all present. At our second meeting in August we were invited by the Hillside Sterilized Milk Depot to visit and inspect their plant and sample their various products; this partook of the nature of an informal reception which was very much enjoyed by those who attended.

Immediately after our last meeting Drs. Brown and McLester tendered the Society and all visitors an elegant and most enjoyable reception and smoker at their new infirmary; their kind invitation was accepted by a large number, everyone of whom thoroughly enjoyed their hospitality.

Such functions go far toward bringing our members in closer touch with one another, and should be held at least once a quarter. In order that we may be brought into closer social intercourse we should take active steps to procure a hall for our exclusive use, in this or some other building, and raise our dues to such an amount as to enable us to fit up that hall in comfortable condition. This could easily be done if we would only try in earnest. The Medical Library Association (once started, but now dead), or some similar organization would do much to aid us in this direction if we could get up enough enthusiasm along these lines.

It has within the past year or two become a custom with County Medical Societies in this State to invite prominent members of other Medical Societies to read papers. Such actions doubtless stimulate our doctors to better work, and will create a stronger bond of union between the several county societies in Alabama, and thereby strengthen our already splendid State Medical Association. Such invitation should be extended oftener. We have had as such guests this year our efficient State Health Officer, Dr. W. H. Sanders of Mobile, Dr. W. L. Nolen, President of the Chattanooga Medical Society, and Dr. R. S. Hill, ex-President of the Montgomery County Medical Society. Dr. John A. Wyeth of New York, ex-President of the

American Medical Association, was invited here last May, but could not come on account of previous engagements. Visitors always receive a cordial welcome in attending our meetings.

We have tried to have two essayists at each meeting, but when the evenings are short this does not give sufficient time for proper discussion of papers, thereby preventing some of our more timid members from taking an active part in our meetings. I fear we have also become too careless about reporting our interesting cases for the consideration of our brother doctors. These cases should be reported in writing, as we thereby give a more concise and accurate account of them. I have also tried to get our members to bring patients before the Society; this has been done to a certain extent, but not as frequently as it should be. We should also make it a general rule to show our pathological specimens here where we have interesting ones; they are always appreciated.

At the request of Dr. LeGrande, the editor and proprietor of the Medical Journal, the Society recently made preparations to have its minutes published in that organ; this has had its stimulating effect on our members.

I have adopted the plan of placing the name of the member who is to lead in the discussion of each paper, as well as the name of the essayist and his subject, on our announcement cards, and this, too, has greatly improved our discussions.

For years this Society has held its regular meetings bi-monthly (on the second and fourth Monday evenings), but our membership has now become so large, and the amount of work at each meeting so great, I believe we would in future do better by meeting weekly, and not attempting to have more than one regular essay for each evening; this, with reports of cases and other regular business, will well take up the usual time allotted to a meeting. The calling of the roll every time we assemble is in my judgment useless, and obsolete, and should be dispensed with.

In view of the outbreaks of typhoid fever in Ithica, N. Y., Butler, Pa., and elsewhere, we should guard unceasingly our water supply to this city and its suburbs, and should always bear in mind that in medicine there is more in prevention than in cure of disease.

When we look back to our last Legislature we cannot but realize that if we ever expect to get any beneficial legislation from that body, or even hold that which we now have, it is very clearly evident that we must wield a stronger political influence in future than we have ever done in the past; and while I do not advise that as a Society, we ever enter politics, yet as citizens we should, before the primaries

look more carefully into the views on medical legislation of those who aspire to be our law makers.

This Society has reason to be proud in claiming the honor of having as one of its members, the Lieutenant Governor of this State, who during the last Legislature, stood nobly by the profession in casting the vote in the Senate that defeated the Osteopathic bill. Too much praise cannot be given Dr. Cunningham for this act.

In conclusion, I again thank you for the honor of being elected president twelve months ago, and now in surrendering to you the gavel of authority, I desire to thank each and every one of you for your uniform kindness and courtesy, and especially do I desire to thank those who have read essays, discussed papers, reported cases, and otherwise aided in making 1903 the banner year in the history of the Jefferson County Medical Society.

THE DIAGNOSIS OF GONORRHOEA.—A PLEA FOR SYSTEMATIC EXAMINATION FOR THE GONOCOCCUS IN ALL CASES OF URETHRAL INFLAMMATION.

By Harold G. Palmer, M.D.,

PROVIDENCE, R. I.

Gonorrhoea is not a disease evolved since the establishment of modern bacteriological science. The earliest reference to genital disease is found in the third book of Moses[1] and dates to 1490 B. C. Herodotus mentions urethral disease, and later authentic medical accounts of Gonorrhoea appear in the writings of Celsus and Hippocrates[2].

It is of historic interest to note the fact that it was three centuries more than 3000 years from the first mention of the disease to the discovery of its true causal agent.

In 1879 Neisser[3] observed definite micro-organism in the purulent discharge from the adult urethra and also from the conjunctival folds of the new-born infant. Neisser found cocci of moderate size arranged in pairs, the sides in apposition being somewhat flattened. Not long after Neisser's discovery the organism was isolated and grown in pure culture by Bumm[4]. Neisser's conclusions on the gonococcus antedate by three years Koch's demonstration of the tubercle bacillus

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1. Leviticus XV.
2. Ashurst. International Encyclopdia of Surgery, Vol. II, p. 325; 1882.
3. Centralblatt f. d. med. Wissenschaften, No. 28, 1879. Neisser.
4. Weisbaden. 1887; Der Mikroorganismus der gonorrhoischen Schleimhauterkrankungen; Bumm.

and we are appraised of the fact that the causal agent of gonorrhoea ranks as one of the earliest demonstrations of modern bacteriology. A period of twenty years has witnessed marked developments in the laboratory study of the gonococcus, and concomitant with this, as in any disease of bacterial origin, the clinical and scientific aspect, hand in hand have advanced, to the mutual benefit of both, and withal most advantageously to the unfortunate sufferer from this disease.

The Gonococcus. In describing the morphology of the gonococcus I shall mention the features observed in the average cover-slip taken from an acute urethritis. It is an organism of about the size of the ordinary pyogenic cocci but on account of its arrangement it seldom if ever presents microscopically their spherical outline. The organism is usually arranged in pairs, diplococci, the sides in apposition being flattened and usually slightly concaved. The organisms may be aptly described as "biscuit shaped" cocci. They occur in greater or less abundance in the purulent discharge of all cases of gonorrhoeal infection, but the number present in any particular specimen bears no relation whatever to the severity or duration of the disease. The gonococcus may be found in any element of an infected discharge. The typical situation is within the leucocytes, the cytoplasm of which is frequently found so filled with the organisms that the nuclei are crowded and compressed. The gonococcus stains readily with any of the basic aniline dyes in aqueous solution. Methylene blue is the preliminary stain usually selected. For a positive clinical determination, any suspected discharge must be stained after the method of Gram, by which the gonococci are decolorized, while the ordinary pyogenic cocci retain a deep violent color. It may be of interest to state the technique of routine clinical examinations made in my own laboratory. Two cover-slips are taken in the usual manner with the platinum loop. The first is stained with an aqueous methylene blue and is examined for bacteria. If diplococci, morphologically gonococci, are found either within leucocytes or free, the second cover is stained by Gram's method, Bismark brown being used as a counter-stain for differentiation. If the examination of this cover shows diplococci stained brown within the cytoplasm of the leucocytes, the case is consider gonorrhoea.

From the scientific standpoint the study of cultures the gonococcus is of much interest, but clinically is not essential unless the case in question is a prospective medico-legal one. Forensic medicine is most exacting, and, in cases coming in this class, cultures must be made if possible followed by inoculations if the expert witness would

avoid being entrapped and humiliated by a shrewd and well informed lawyer.

In passing a word must be said of the culture peculiarities of the gonococcus. Unlike the bacteria usually encountered in clinical medicine, the gonococcus will not grow on the ordinary culture media, e. g. Loeffler's blood serum. Laboratory investigation has proven that it can be developed only on such media as have incorporated in them some suitable element from the human body. Human blood serum is undoubtedly the best. However, the fluid of any serous exudate and indeed human urine[5] when combined with suitable agents may well suffice. The colonies are evident in twenty-four hours and appear as slightly elevated, shining, grayish points. Pure cultures can be obtained only in the first two or three days of the disease, since later, contamination of the urethra by other micro-organisms is inevitable.

Pathology. To understand the pathology of gonorrhoeal urethritis it is necessary to be familiar with the histology of the urethra. It may be sufficient to say that the urethra is a canal lined with a mucous membrane, which throughout its entire length contains minute racemose glandular tissue, the glands of Littre. In gonorrhoea these glands play an all important role. Urethral inflammation does not differ materially from that in any other mucous membrane. It may not be inconsistent to mention the route of invasion and seat of development of the organism which causes the clinical manifestations of the disease. In the majority of cases the infectious material on entering the meatus finds lodgment in the fossa navicularis and planting itself there in some minute fissure or abrasion of the mucous membrane, begins to develop. From this point, the infection may extend back ward until the bladder or some or all of the accessory genital organs are involved.

If infection were confined to the surface of the urethral lining, the course of the disease would be brief and the treatment simple. Unfortunately before there are any subjective signs of the disease, the gonococci have usually penetrated the mucous membrane and are propagating in the glands of Littre and in the submucosa. The glands of Littre are undoubtedly the mischief makers in many cases of gonorrhoea, especially the neglected ones, for the inflammatory process is persistent and when once established it is an easy matter

5. James Homer Wright, "On the Cultivation of the Gonococcus from cases of Gonorrhoea, Opthalmia Purulenta, and Pyosalpinx." (Am. Jour. Med. Sen., Jan. 1895.) also Pathological Technique;—Mallory & Wright, Second Edition, 1901.

for their lumina to become occluded. By this occlusion there is formed a focal abscess, miliary in type, an abscess containing material highly inoculable and virulent. In severe cases there is no reasonable doubt that large numbers of such abscesses are formed. Like any other abscess, there is a physical limit to its continuance, and when this is reached the abscess bursts in the line of least resistance, which is practically always into the urethra. Clinically this often occurs rather late in the course of the disease after all frank secretion has ceased, and is heralded by a re-established copious purulent discharge. I am confident that foci of infection may remain latent in occluded glands for many months, perhaps years, only to spring into potential activity at the call of a sufficient irritant. That this very condition is an important factor in chronic gonorrhoea and gleet cannot be doubted.

The gonococcus is a short lived organism, but it, like other bacteria pathogenic to man, produces, even in its short sojourn, toxines capable of doing great injury to the tissues of the human body. The contents of a focal urethral abscess may be rich in these toxines for a very considerable time after the gonococci causing the infection have lost their virulence, or have even disappeared. An occasional minute leakage of the toxine laden contents of an occluded urethral gland may be quite sufficient to produce a gleet and continue it indefinitely. The gonococcus shares with Lustgarten's bacillus, the bacillus of syphilis, the distinction of being entirely innocuous to the animal kingdom aside from man. Consequently in experimental research, the only successful inoculations with the gonococcus have been in the human subject.

Clinical Consideration. Viewed from the clinical standpoint there are few pathogenic organisms, the deleterious effects of which are more widespread or universal than are those of the gonococcus. It is the duty of every physician to be familiar with all of the clinical manifestations resultant to gonococcic invasion, and furthermore to possess at least a theoretical knowledge of the pathology and bacteriology of the disease.

Incubation. The gonococcus has no fixed period of incubation. You are all familiar with the rapidity with which gonorrhoeal ophthalmia may develop. Twelve hours is sufficient and forty-eight hours an unusually long period of incubation. In the urethra of the male adult the period of incubation is quite uncertain. My personal experience in the cases coming for microscopic examination has shown the shortest time forty-eight hours, the longest time two weeks, before the manifestation of subjective symptoms and the concomitant

demonstration of the presence of the gonococcus. It is not at all necessary to have a free discharge, or to have it even microscopically purulent, to demonstrate the presence of the gonococcus. In the earlier cases I have frequently found gonococci situated in typical form and absolutely diagnostic, when the only suggestion of a discharge was a mere moisture at the meatus. Microscopically this "moisture" is composed of mucous, urethral epithelial cells, and a very few leucocytes; the last two elements containing Gram decolorizing diplococci. In the male subject there is absolutely no ground for pleading ignorance of the presence of the gonococcus in the urethra, either on the part of layman or physician, if a careful, systematic microscopic examination of the discharge has been made. And per contra, if such examinations invariably were made in every urethral case there would be an astonishing reduction in the number of cases of gonorrhoea recorded annually in this community. It is certainly unfortunate that the determination of the presence of the gonococcus in the female is attended with so much difficulty, and is often impossible, even though by confrontation, a definite case may be absolutely traced to a certain female. Woman bewails her misfortunes, and suffers from many, the origin of which are, to her, unknown. Gonorrhoea stands preeminent in the latter class. Nor is she always conscious of her unhappy condition. It is quite possible for a woman to harbor a virulent gonococcic infection in certain parts of the genital tract without manifesting either subjective or objective symptoms. The most frequent and prominent subjective symptom is dysuria. This in itself has no real significance, for there are many causes for this condition other than gonorrhoea. The inspection of the female genital tract without careful microscopic examination of cover-slips from every separate region, is absolutely worthless in so far as the determination of the presence or absence of gonorrhoea is concerned. During the past ten days the writer has had occasion to make a microscopic examination for the gonococcus in five different women, none of whom were prostitutes. On inspection not one showed an appearance that would suggest gonorrhoea. Two of the five had marked dysuria. Of these two, the gonococcus was demonstrated in the urethral and vaginal secretion of one, and was absent in the other. The three other cases were negative.

Prostitution is a vice which has existed as a necessary evil almost since the creation of man. Our duty as physicians is not to try to reform prostitutes, but to make earnest efforts to enlighten these unfortunate members of society, and the public as well, in the true nature of venereal disease; its etiology, its treatment, and its dangers.

The method in vogue in this country of casual inspection of prostitutes by any physician into whose office they may stumble, is to be highly condemned. They are inspected; the fee is paid; and they walk away with a feeling of satisfaction and confidence, carrying with them a certificate of health, not worth the paper upon which it is written.

There is another aspect of this question which justly concerns us. How many physicians would attempt to enumerate the number of innocent, virtuous women, unknowingly infected from a long-standing gleet, who come annually to the gynaecologist for the removal of pus tubes? What is the cause of this condition? Gonorrhoea. This is the case, even though the gonococcus is only infrequently demonstrated in sections of the diseased tube. It is not necessary for the specific micro-organism to be present in typical form. The toxines it produces which have already been mentioned, are quite sufficient to incite suppuration in the oviduct.

It is not essential on this occasion to make more than passing mention of the areas of the human body, other than the eye and genital tract, which the gonococcus may invade. The organism may be taken in the blood or lymph stream and carried to any part of the body. The frequent seats of extra-genital development from internal infection are the joints and the heart, and in both of these locations its presence has been demonstrated microscopically. The gonococcus has been obtained in pure culture from the blood during life.

Gentlemen, today, science has supplanted empyricism in our knowledge of the etiology and treatment of disease. In gonorrhoea is the fact most strikingly exemplified. Because a man coughs and his respiration is accelerated, you do not say from these symptoms alone that he has tuberculosis; nor from a polyuria do you blindly say, Bright's disease or diabetes. A vaginal or urethral discharge is only a symptom; why, then, should any conscientious physician say blindly from this symptom, "You have gonorrhoea?" Not all genital secretions are specific; neither are all purulent urethral discharges resultant to gonococcus invasion. On several occasions, men under high nervous tension have presented themselves at my laboratory, suffering from a guilty conscience and a purulent urethral discharge, and have departed calmed and happy on learning of the absence of the gonococcus. It is criminal to tell a confiding patient that he has a typical gonorrhoea, when the discharge is in truth resultant to urethral chancre; a mistake, which, except in cases of mixed infection, is impossible if a microscopic examination of the discharge is made. In the city of Providence there are now about 400 practicing physicians.

How many of this number examine for themselves, or cause to be examined microscopically, the discharge supposed to be of gonorrhoeal origin? How many practitioners are there in our State, considering themselves careful and well informed, who are not only willing to call but also do call every purulent urethral discharge a "clap" and prescribe the time honored zinc injection together with the newest cure-all capsule which the smooth tongue of some well paid retail drug man has lauded?

The gonococcus is not a respector of persons, and respectability renders no one immune. If my observations in the past are not incorrect, professional gentlemen, apprehensive of personal trouble have hastened at the earliest manifestation of any urethral irritation to ascertain by microscopic examination if a gonococcus infection were present. If then, when a malady becomes personal it calls for an immediate microscopic inspection, why should any physician not be equally solicitous for the welfare of his patient similarly afflicted? Gonorrrhea is a serious disease. It should not be diagnosed carelessly and treated with indifference. Before you establish the diagnosis as gonorrhoea give your patient the benefit of careful attention to history, to objective signs and to microscopic examination of the discharge; let this be followed by rational treatment, and you will do far more than can be realized in alleviating the sufferings of humanity. —The Providence Medical Journal.

THE EARLY DAYS OF OVARIOTOMY.*

By Matthew D. Mann, A.M., M.D.,

BUFFALO, N. Y.

The rising generation, which has only seen abdominal surgery in its full development, is apt to forget the trials and struggles of those who first attempted to open the abdomen, and who finally put the operation on a firm basis. Few can realize now the amount of opposition, both within and without the profession, which existed. McDowell, as we shall hear, was threatened with death; and later operators were almost ostracised for attempting this "murderous operation." In the last twenty years, the triumphs of surgery have been so great that now no operation, no matter what its magnitude, is condemned untried, and the result is awaited with patient and in-

*Read at meeting of the Canadian Medical Association, London, Ont. August 26, 1903; also printed in the Canadian Jour. Med. and Surg. September, 1903.

dulgent expectation. But only forty years ago, this was not so, and at the time that abdominal surgery had its beginning, the feeling of opposition to "butchering," as they called it, was most emphatic and unreasoning.

Abdominal surgery had its beginning in America. Many attempts have been made to wrest this triumph from us, but all have failed. The claims of the United States are now generally admitted as being clearly proved, and the name of the first operator rescued from oblivion and duly honored.

The first abdominal section, having for its object the removal of an ovarian tumor, was done by Dr. Ephriam McDowell, on December 13, 1809, in Danville, Ky. Although practicing in what was then the backwoods, McDowell was by no means an uneducated, or pretentious adventurer. The operation was done after long consideration, after a full understanding of the difficulties with which he had to contend, and a careful planning of the technique. He had been a student of the great John Bell, in England, and while there had heard it suggested that perhaps an ovarian tumor could be successfully removed. He formed the determination at that time that, if the proper case ever presented itself, he would make the effort to operate. After his return to Danville, he was sent for to see a Mrs. Crawford, residing a long distance away. McDowell found her trouble to be an ovarian tumor, and gave a fatal prognosis unless she was relieved by the knife. To quote from Dr. Gross:

After a most thorough and critical examination, Dr. McDowell informed his patient, a woman of unusual courage and strength of mind, that the only chance for relief was the removal of the diseased mass. He explained to her, with great clearness and fidelity, the nature and hazard of the operation. He told her that he had never performed it, but that he was ready, if she were willing, to undertake it, and to risk his reputation on the issue, adding that it was an experiment, but one well worthy of trial.

Mrs. Crawford accepted the opinion of the physician with great coolness, and promptly assured him that she was not only willing, but ready to submit to his decision, asserting that any hope of relief was preferable to the agony she suffered. She traveled on horseback—the only mode of locomotion in those days—to the home of Dr. McDowell, sixty miles away. So great was the weight of the tumor resting upon the pommel of the saddle, that a large contusion was formed on the skin.

On the day of the operation, McDowell was conscious that an angry and excited mob of men had collected outside of his house, openly

threatening to hang him if his experiment of "butchering a woman" did not succeed. There is no doubt that if the woman had died, McDowell would have lost his life at the hands of his infuriated townsmen.

I have often wondered which was the braver—the man or the woman—the woman, to subject herself to an operation which she knew had never been done, an experiment which would cause intense suffering at the time, anesthetics being unknown, and the result of which must be uncertain; the man, to risk his life for the mere sake of doing good, without hope of reward, except, perhaps, a modest fee, and with certain death confronting him if he failed. It seems to me that the bravery of the man was the greater. He put his life at stake without any necessity impelling him, except his love of humanity and his desire to do good; while the woman had death staring her in the face, and was accepting an opportunity which had never yet been offered to anybody, to escape the terrbile, persistent suffering which would certainly come. To quote from Thomas Keith: "She had not much to lose—a few months only, it may be, of ever-increasing suffering—and she might gain much by an operation, having much to gain." Fortunately for the good of mankind, and of womankind in particular the operation was successful.

The technique of the operation sounds a good deal like an operation done today. The incision was made, about nine inches long, a little to the left of the median line. The tumor was then opened, its contents allowed to escape; after which it was removed from the abdomen, the pedicle tied by strong silk ligature, and the tumor cut off. After this the patient was turned upon her side, to allow the blood and fluid to escape. This having been accomplished, she was turned on her back, the intestines replaced, and the wound closed by an interrupted suture, the ligature hanging out of the lower end of the incision. Dressings were applied, and the patient put to bed. Five days later, McDowell, on visiting her, found her making her bed. In twenty-five days she returned home in good health, and lived for thirty-two years after, she having been forty-seven at the time of the operation.

McDowell afterwards operated on twelve cases, eight of the thirteen being successful—a record which was not beaten until the advent of antiseptic surgery.

McDowell is described as a tall, strikingly handsome man, with an erect and commanding figure and lustrous black eyes, which seemed to penetrate the very thoughts of those who looked into them. His refinement and intellectual powers were of the highest type. Many stories are told illustrative of his abilities of mind: his un-

flinching adherence to duty in the face of adversity and difficulties seems to have been one of his strongest points. Stories are told of his adventurous rides through the woods, of fording rushing torrents filled with ice and driftwood, and other anecdotes which illustrate the nobility and force of the man's character. He might well have stood for the original of MacLeod, Ian MacLaren's famous hero.

McDowell was a man of strong religious convictions, and we have left to us a very forcible petition offered by him to Almighty God, a few hours before the appointed time to make the first ovariotomy. Who will not say that it was not in answer to this prayer that his hand was guided to bring to a successful termination his momentous and trying experiment, fraught with interest, not only to the operator, but to humanity? It was certainly a trying hour to him, and we can well understand that he should have asked for strength and guidance where he thought he could best obtain them. His biographer says: "His abiding faith in the efficacy of prayer was beautiful, and no doubt his remarkable success in the field of surgery can be largely attributed to his strong convictions and unwavering faith in the Great Jehovah."

After McDowell, no operations of this kind was done until 1821, when Dr. Nathan Smith, Professor of Surgery in Yale College, performed a successful ovariotomy. He was just as much entitled to the honors of a discoverer as was McDowell, for he had never heard of the Kentucky surgeon or of his operation. His methods were different, but the result was just as good.

The third successful ovariotomist was Dr. Alban C. Smith, of Danville, who had been a partner of McDowell's. He operated in 1823. A few scattering operations were done after that, but it was not until 1843-44 that a new impulse was given by the success of Dr. John L. Atlee, which was still further aided by his brother, Dr. Washington L. Atlee, of Pennsylvania. After this, cases became more common, and, taking the country at large, several were reported every year, until in 1855, there were twenty-one cases, with six successes and fifteen deaths. This heavy mortality seems to have had the effect of diminishing the number, as they fell off rapidly, until in the years 1860-63, there were only three in each year. In 1870, Dr. Atlee reported his 200th case, while Kimball had had 121, and Dunlap, Peaslee, J. P. White, McRuer, Thomas, Bradford, Emmit, and Sims had had from 60 to 12 cases each.

In England the operators who first made reputations were Tyler Smith, Baker Brown, Chas. Clay, Thos. Bryant, Thomas Keith, and Spencer Wells. To the latter we must unquestionably give the credit

of having contributed largely to influence the profession, and to overcome the opposition which, up to 1860, had existed in England more than anywhere else. Many prominent men opposed the operation, very broadly denouncing those who attempted it as murderers, as guilty of malpractice, and using all their influence to keep the operation down. After Sir Spencer Wells's paper in 1860, opposition was silenced, and from that date it may be said that ovariotomy was adopted as a legitimate resource in England.

My own experience of ovariotomy began in 1870, when I entered the Strangers' Hospital, in New York city, as interne. Dr. T. G. Thomas was appointed gynecologist to this hospital, which had just been established; and, filled with ardor and enthusiasm, he soon collected a considerable number of cases for operation. During the year that I served as senior assistant and house-surgeon, I had under my care twelve operation cases, nine of which recovered. As can be readily imagined, an ovariotomy in those days was a great event. I have seen in the operating room at the hospital, witnessing and advising, and perhaps assisting, Drs. Thomas, Sims, Emmet, Noeggerath, Sands, Willard Parker, and others of the great lights of surgery in New York at that time. As we had no trained nurses, Dr. E. L. Trudeau, who was my senior by six months, and myself had to take the entire charge of the cases. The nurse would call us frequently during the night, and we would pass the catheter, give hypodermics of morphine, and do all the nursing which is now so much better done by our skilled and trained assistants.

Dr. Thomas's theory in those days was that a great deal of the danger was due to the shock to the nervous system, which led to inflammation; and in order to quiet the nervous system, the patient was put under the influence of opium for a few days in advance of the operation. We can see here the influence of the Alonzo-Clark treatment of peritonitis. if large doses of opium would cure peritonitis, smaller doses would prevent. And so, in order to head off the disease, of which everybody stood in holy terror, the opium was given before the operation was commenced.

Dr. Peaslee was the first to perform drainage, which he did as early as 1855. He passed a catheter through the vaginal wall into Douglas's cul-de-sac at the time of an operation, and left it there, corking the end. Septic symptoms supervening, he removed the cork, and allowed the fluid to come away, and followed it by copious injections into the peritoneal cavity of salt solution, and later by a weak solution of chlorinated soda. He published a paper on the subject in 1870. Thomas immediately took up the idea, following

Peaslee's plan of putting a linen tent into the lower angle of the wound. Soon after this the idea of a drainage tube came from Koeberle of Germany. Thomas immediately began its use.

I remember very well the first drainage tube (1871), which was an old-fashioned, hard-rubber vaginal syringe, an inch in diameter, with four holes at the round end. This was introduced on the second day, the tent of cloth which has been placed in the lower angle of the wound the day of the operation, being removed.

Dr. Thomas also followed Peaslee by washing out the abdomen in a septic case, after the operation, using a solution of hyposulphite of soda. As early as 1871, he washed out the abdomen before closing the wound. Antiseptic ideas were then just beginning to dawn. Carbolic acid had just been discovered, and Lister was making his first experiments in what we now call "Listerism," experiments which were destined to revolutionise surgical methods, and to make the name of Sir Joseph Lister one of the greatest in the records of the benefactors of the race.

Although, as already mentioned, drainage was used before Sims began to do abdominal work, it was his paper, published in 1872, which really popularised drainage in abdominal cases.

Dr. Thomas, up to 1870, had had twenty-seven ovariotomies, and was only excelled by one other operator in New York, namely, Dr. Peaslee, who had had twenty-eight. Sims, who never made a great name as an abdominal surgeon, had had only twelve. It must be remembered that at this time all other forms of abdominal surgery were unknown and almost undreamed of. I remember very well when Pean's book came out, about 1871, detailing the histories of a large number of fibroids that had been successfully removed, that Dr. Thomas expressed very grave doubt as to the truthfulness of the histories.

In those days the after-treatment of the cases was made very much more difficult, and the convalescence very much slower, by the method of treating the pedicle. While McDowell had used the ligature, dropping the pedicle, and had done so successfully others seemed to be afraid of following his example. The great doubt was as to what would become of the piece outside of the ligature. This, it was feared, would die, and poison the patient. Many of the deaths in the early cases were attributed to this cause. To overcome this difficulty, various plans were suggested. Baker Brown used the cautery, and, as Mr. Tait pointed out, had he lived, no doubt abdominal surgery would have been advanced many years; for, although we cannot help acknowledging an immense debt as due to Sir Spencer Wells,

still we cannot deny that he kept back ovariotomy and abdominal surgery by his energetic advocacy and use of the clamp. His plan was to clamp the pedicle, leaving it on the outside, the abdomen being closed tightly around it, the clamp preventing it from falling in.

Dr. Thomas was a bold and brilliant operator, a great diagnostician, and full of invention and resources. His record after these early years is well known, though he came a little too late to reap the full advantages of modern abdominal surgery. To my association with Dr. Thomas in those early days, I must attribute my interest in this branch of medicine, and, to a great extent, my success. To no man, living or dead, do I owe more than to him. In fact, had it not been for Dr. Thomas, I should not have held my present positions, as it was by his influence that I became Dr. White's successor and a resident of Buffalo. Dr. Sims, although I knew him well and have seen him do some plastic work, I never had the pleasure of seeing him open an abdomen. Dr. Peaslee I also knew well, but never saw him operate.

In those days the New York Obstetrical Society was the scene of many exceedingly interesting discussions. Abdominal surgery and gynecology were making rapid strides in advance. Sims, Peaslee, Thomas, and Emmet were the four men who have done more for gynecology than any Americans who have ever lived. They were then making rapid advances, and in the obstetrical society the new ideas were proposed and weighed and discussed, to be afterwards tested at the bedside and on the operating table, and the results reported back to the society. I was secretary for a number of years, and had the greater advantage of being obliged to take down these discussions. I am sure that this was of great benefit to me, as it fixed in my mind a great many facts which I probably should not otherwise have learned.

Besides these greater lights, Noeggerath, whose name is well known as the discoverer of latent gonorrhoea; Jacobi, still a nestor in the profession; besides some of the younger men, who have since made name and fame, were active members of the society.

Buffalo took a prominent part in the early days of abdominal surgery. Drs. James P. White and Julius F. Miner were both pioneers. Dr. White probably did a hundred ovariotomies during his life, about 60 per cent. of which recovered, as far as I can learn. Dr. Miner never did so many, but he originated a principle which has made his name to be mentioned wherever the history of ovariotomy has been spoken of—he originated the idea of enucleation. This I had seen done by Dr. Thomas, but had never practised until I did my first ovariotomy in Buffalo.

My first case was done in Hartford, Connecticut, in 1879. The patient was a poor negress. I had to pay the nurse myself, and, as she lived four miles in the country, in a poor little farmhouse, I had to hire a horse each time I made a visit. As you can readily imagine, I did not make a fortune immediately out of the case. Still its effects on my future were greater than were at first apparent. The event was a great one, and my friend, Dr. Munde, came all the way from New York to assist me. He had never operated himself, nor had anyone else present ever seen an ovariotomy. I found a dermoid cyst so adherent that I could not get it out. I therefore cut off all I could get loose, and sewed the edges of the remaining portion to the edges of the abdominal wound. Two glass drainage tubes were used, one being put into the sac and the other into the abdominal cavity. The patient convalesced very slowly, and required many visits. I estimated that the case cost me $50. Still it paid, for it gave me experience, and allowed me to say that I was an operator—great advantages when the call came to go to Buffalo.

To illustrate the fear which the early ovariotomists had of the peritoneum, I remember very distinctly a case which came to me a number of years ago. She had a large fibroid tumor and a tremendous ventral hernia. She told me that she had had an ovarian tumor, which had been removed by Dr. Miner, the first successful operation that he had ever done. She showed me a copy of an account of the operation, published in the Buffalo Medical Journal at that time. In this article, Dr. Miner attributes his success to the fact that he did not pass his stitches through the peritoneum, but only through the skin and fat. This, while it does not explain the success of the operation, certainly explains the ventral hernia. I removed the fibroid, and sewed up the hernia, and sent the woman home cured.

Thus far I have spoken only of ovariotomy; but it is quite natural that the opening of the abdomen for the removal of ovarian tumors should have led to the same procedure for other purposes. In 1876, Dr. Robert Battey, of Rome, Ga., read a paper before the American Gynecological Society, on the extirpation of the functionally active ovaries. He had performed his first operation in August, 1872. In 1879, Mr. Lawson Tait announced that he had done a similar operation, claiming priority over Battey. Prof. Hegar, of Freiburg, in Germany, published in 1878, a paper on the castration of women, his first case having antedated Battey's by a month. After the publication of these papers, the indications for opening the abdomen were very quickly widened, and the operation took firm hold upon the profession, being performed by operators all over the world; and at that

time we may say that abdominal surgery, other than ovariotomy, had its origin.

I first removed the ovaries, March 11, 1880, in Hartford, Conn., for a fibroid tumor. The first operation for the removal of the ovaries which was done in western New York, was performed by the late Dr. G. C. Clark, of Niagara Falls, 1882. I had the pleasure of assisting him; the operation was perfectly successful.

My first operation in Buffalo for the removal of the ovaries was in November, 1883. On March 4, 1884, I did my first resection of intestine; likewise the first that was done in Buffalo. In October of the same year, I removed a large fibroid tumor by supra-vaginal hysterectomy with the clamp. The woman is still living.

Although I did many operations for the removal of ovaries and fibroids from that time on, it was not until February, 1888, that I first removed pus tubes. After this, the indications for operations and the number of cases increased rapidly; but I did not meet with a case of extrauterine pregnancy until 1890. I operated on four during that year. As I was almost the only operator practising abdominal surgery in Buffalo then, these were doubtless the first operations of their kind which were done there.

We thus see that abdominal surgery is of very recent development, the greatest growth and extension of the operation having taken place in the decade between 1880 and 1890. It may now be said to be nearly perfected, and, except in operations on the gall-bladder and the stomach, we cannot look forward to many more advances.

What has made possible the great successes of modern abdominal surgery? Two things will at once come to the mind of each of you —anesthesia and antisepsis. Without these there could have been no development. Although the early operations were done without anesthesia, the operations now undertaken would be impossible under smilar conditions.

Nor is antisepsis—or, perhaps, more strictly speaking, asepsis—any less important. The mortality rates of the pioneers are often frightful to contemplate; and only where life was directly threatened, as in ovarian cystic disease, were operations warranted. So recently as 1880, the writer collected all the known cases of oophoerctomy—150, with a mortality of 20 per cent.; and in 1884, Bigelow collected 359 hysterectomies for fibroids, with 58 per cent. mortality. Now all this is changed, and we open the abdomen, even in comparatively simple diseases, with perfect confidence in the result, as far at least as sepsis goes. So much has been accomplished by Lister, Pasteur, and their co-workers.

But, after all, is it not to the American workers that a very large share of the mead of praise is due? Who have done more than McDowell, Nathan Smith, the Atlees, Kimball, Miner, Sims, Peaslee, Thomas, Robbs, Battey, Sands, McBurney, and Bull—to say nothing of the men of our own day, who have improved, extended, and perfected the work of their predecessors? Certainly America has a right to be proud of the credit of originating and perfecting this important branch of surgical work. Not only did ovariotomy originate here, but hysterectomy for fibroids was first done by Kimball. Peaslee and Sims originated drainage; Battey first removed diseased ovaries; Willard Parker did the first operation for disease around the appendix; while Sands, McBurney, Senn, and Weir were the pioneers in appendectomy. Bull did the first operation for bullet-wound of the intestines; and Rogers was the first to advocate the operation for ruptured tubal pregnancy. Kimball's lead in removing fibroids was followed by many, and was so perfected by the work of Stimson, Polk, Baer, Pryor, and others, that it is now known as the "American operation." Robbs was the first to do the modern operation of cholecystectomy, while the genius of Sims had a most important influence on advancing this particular branch of surgery.

But I need not add to the list. It is recent history and familiar to all students of contemporary literature.

When we look back and see what has been accomplished, it seems almost miraculous—all fear of the peritoneum gone; sepsis nearly banished, and scarcely an organ in the abdomen which has not been successfully attacked and removed. Liver, gall-bladder, spleen, stomach, intestines, kidney, uterus, tubes, ovaries, bladder—all have yielded to the surgeon's knife, and their possessors relieved of serious or fatal diseases. It is a proud record. Little did McDowell think, when he took up the knife to make his first abdominal section, to what it would lead, and of the years of agony which would be relieved and the thousands of lives saved. All honor to the men who have done this work. Their names should stand higher in the roll of fame than those of generals and conquerors. They have worked to relieve pain and suffering, and to save life, while the soldiers accomplished their ends only through the infliction of measureless agony, and the sacrificing of countless lives.—Buffalo Medical Journal.

31 Allen Street.

ECTOPIC GESTATION.*

By M. Smith, M.D.,
SULPHUR SPRINGS, TEXAS.

In selecting ectopic gestation—or a more appropriate term, "tubal pregnancy"—for my subject I owe an apology, for my limited experience will not allow me much data to draw from, having only had two cases in my twenty-two years experience in the practice of medicine. The first case was one of the intra-peritoneal variety and was in a dying condition when I was called. The second was of the extra-peritoneal variety, the hemorrhage being confined to the broad ligament and was of the mildest form.

The term ectopic gestation applies to all cases of pregnancy that take place outside of the uterus. This being the case, we are led to ask where a normal pregnancy occurs—concerning which there are many views. Some contend that it takes place in the uterus, Tait for instance. Others say that it takes place in the tube. Most authorities, however, disclaim the Tait theory and conclude that pregnancy does occur in the tube. The ovum and spermatozoa meet perhaps in the uterus, the upper portion of which is lined with ciliary epithelium; the amoebic movement of spermatozoa is wafted along by the conjoined force of the ciliary epithelium and the amoebic movement of the spermatozoa into the tube, where it remains about eight days when it is forced back into the uterus by the peristaltic action of the tube.

There are three places for tubal pregnancy to occur. First, in the isthmus—the interstitial variety which is rare. Second, in the ampulla, or that portion of the tube between the isthmus and fimbriae —the so called dilated portion where the greatest number of tubal pregnancies take place. Third, the fimbriae ovaria, or fimbriated extremity where it will be conceded almost impossible for pregnancy to take place, while in animals the spermatazoa have been found floating around ovarian tissue. With these facts before us we may be surprised that extra-uterine pregnancy does not occur more frequently; still it is exceedingly rare, Montgomery giving only three authentic cases out of a large number. Kelly designates it as being one of the greatest gynecological rareties.

Ectopic gestation may be caused by any factor which arrests the fecundated ova in its passage to the uterus. The ovum may fall into a diverticulum in the tube. It may be stopped at a point of stricture which has been produced by an adhesion, flexure or stenosis of the tube. Sometimes a tube remains convoluted as in infancy, and the plicae so numerous as to favor interference with the retrogressive movement of ovum. Emotional condition at the time of conception is mentioned by Montgomery as a possible cause. By far the greater

*Read before the North Texas Medical Association, December, 1908.

number of tubal pregnancies are due to adhesions which bind the tube in such a way as to prevent its normal peristaltic action. Prior says, that simple catarrhal salpingitis causes a condition of the tubal mucosa propitious to the occurrence of eectopic gestation; but the more usual and severe form of salpingitis rather tends to prevent ectopic gestation. Most of his cases gave histories of mild sepsis after abortion or labor. It is well to remember that sepsis extends through the lympathics and not primarily through the tubes, producing peritonitis rather than salpingitis. The lymph effusion seals the ovary to the tube and prevents tubal peristalsis; hence the much talked of ciliary epithelium is absolutely helpless to transport the fecundated ovum back to the uterus but must be done by the tubal peristalsis.

Now, the ciliae are provided for another essential and entirely different purpose. The ovum is a most perishable structure; its delicate walls cannot withstand the pressure of the contracting mucous surfaces brought into apposition through the agency of peristaltic force. In order that this force may not prove fatal to the ovum it is necessary that some provision be made by which it shall be protected from this peristaltic pressure in its journey to the uterine cavity. Now, the arrangement of the cilia provides a bed of velvet on the pile of which the hope of the race safely rests its passage. The pressure of the visitor through the delicate ciliary bed conveys the signal to the presiding nerve center and the rhythmical muscular contractions are at once inaugurated, and the ovum is gently rolled along into the uterine cavity. Pfaff in Journal Amer. Med. Association so beautifully describes this condition I quote the above from his article.

Pfaff also asks if this peristalsis be so necessary and essential for the transportation of the impregnated ovum back to the uterus, then certainly the numerous factors which occasionally operate to produce paralysis of function in similar structures may fairly be regarded as causes of tubal pregnancies.

The diagnosis of tubal pregnancy is not always so easy as we are sometimes led to believe. In the beginning, as a rule, the symptoms of normal pregnancy exist, especially if it be of the interstitial variety —morning sickness, excessive or depraved appetite with many of the other reflex symptoms too numerous to mention, lead the patient to believe that she is pregnant until seized with severe abdominal pain due to rupture and all the symptoms of severe shock, collapse and perhaps death as in my first case. Other cases may not have missed a regular menstrual flow, but at about the time the flow should appear there comes the same violent pain in the lower abdomen with symptoms as before indicated but not so violent as was the case in my second case. Another very material diagnostic symptom and per-

haps the most trustworthy of them all is the microscopical examination of the flow from the uterus, where the decidual and choroidal villi may be found—it being a conceded fact, it matters not where the pregnancy takes place, that the decidual membrane is formed in the uterus and the shedding of this membrane is accountable for this flow that is so often mistaken for normal menstrual afflux. I will state in this connection that the physician rarely ever has the opportunity of making a diagnosis until after rupture has taken place. Another very important point I would like to impress most forcibly is that the vast majority of cases of haemato-salpynx and pelvic haematocele are primarily tubal pregnancies. All authorities agree that women who have been previously sterile are far more liable to this form of pregnancy. Just why, they do not say.

The treatment of ectopic gestation is still in disputed grounds; but the one infallible rule that each case is a law unto itself, is no better demonstrated than in this condition. Therefore, the conditions presented in each case must govern the surgeon as to the proper course to pursue.

I might divide the treatment of these cases into three groups: First, before rupture takes place, operate as soon as diagnosis can be made. Second, after rupture has occurred, operate immediately. The one condition that could be waited on possibly would be hemorrhage into the broad ligament or extra-peritoneal where perhaps the bleeding might be controlled by its own pressure. Third, and I suppose the only one where there is any difference of opinion as to the proper treatment, is where rupture has taken place and the foetus is viable. Even then some advise immediate operation; others advise waiting in the hope of saving the life of the child. If we could be assured that we could save the life of the child and deliver a well developed baby, which rarely happens, we might be inclined to wait; or if after rupture, and hemorrhage not too great, the child not being viable, we might wait until nature comes to the rescue of the patient and absorption of the exudate takes place, almost severing its connection with all vital parts—the child undergoing lithopedic degeneration, making the operation later on vastly more simple and safe. Should the child continue to live until its normal time for delivery the question then presents itself in a quite different light; but nearly all agree that the best thing to do is to deliver the child by abdominal section, stitch the placental membranes to the abdominal wound, letting the placenta come away by sloughing; otherwise an effort to remove the placenta would be attended by such violent hemorrhage as to so seriously endanger the life of mother that at least 90 per cent. would succumb.—The Virginia Semi-Monthly.

Selected Articles.

LEGISLATION FOR FREAKS AND FRAUDS.

Every little while some member of a State Legislature furnishes amusement by introducing a freak bill as evidence of his mental aberration, incompetency or idiosyncrasy. One of the latest is a bill introduced into the Iowa Legislature to legalize a new school of healing to be called "psychiropathy," apparently a sort of catch-all, to take in everything except the schools of medicine that are already recognized by the law. Eddyism, Dowieism, vitopathy, sarcic psychology—whatever that is—chiropractic, hypnotism, etc., are all lumped together with the Swedish movement cure, and hydropathic treatment under this general designation of psychiropathy. The results would, of course, be to let in every kind of fraud, quackery and delusion that can creep in under this comprehensive head. We have too much confidence in the good sense of the Iowa Legislators to think that the bill will go through. There is even a suggestion that it is introduced as a sort of sarcasm, with no idea of its passing. It is well to be on the lookout for everything of this kind, however, for there is no telling in what way the humbugs will show up, and legislative sessions are too often perilous times for good government.—J. A. M. A.

A SIMPLE METHOD OF TREATMENT OF HEMANGIOMA.

Dr. Carl Beck in Jour. A. M. A., adds more to the literature of treatment facial angioma. Angioma, a most common condition, has not received the attention it deserves. Many otherwise beautiful faces are marred by a large or small angioma. The growth of these tumors are sometimes very rapid, especially when they occur in the young. Beck describes his method as follows: "A thread of catgut is passed in a zigzag manner, first below the skin, then underneath the base of the tumor; then again underneath the skin, underneath the tumor, etc., until the tumor mass is included in this continuous suture. This suture is drawn tight and closed at the point of the entrance of the needle. In this manner the circulation is shut off within the tumor, but no gangrene follows inasmuch as some blood can yet reach the parts not included in the surture." The author repeats this process till the angioma disappears.

Wyeth has met with admirable results by subcutaneous injections of boiling water in these growths. Unfortunately the effects of the injections often cannot be limited. Payr has introduced magnesium

nails to treat this condition. Thermo-cautery has found its advocates as well as the electro needle. Scarification is also practiced in the treatment of angioma in a similar manner, as it is used in herpes erythematosis. In small angioma the use of the electric needle seems most adaptable.

CONTROL OF PROSTITUTION AND PREVENTION OF SPREAD OF VENEREAL DISEASES.

Jour. A. M. A., Jan. 30, 1904). Heidingsfield says that "the suppression of prostitution is impossible, and control is impractical; it is absolutely incapable of coping with the larger and more dangerous class of clandestines, and it is powerless and impotent to materially prevent the spread of venereal diseases, emanating from those directly under control. Its influences are decidedly pernicious and harmful, inasmuch as it defeats salutary segregation, increases the more dangerous class of clandestines, restricts liberty and infringes on personal and constitutional rights. It legalizes crime and fosters disease and immorality by imparting a false sense of security, and is virtually a deception and a snare. It creates opportunities for blackmail and personal gain, brooks an unjust and often unendurable interference, and discourages necessary and salutary medical attention. There are far more rational and legitimate measures for the prevention of the spread of venereal diseases, along the lines of the suppression of abortionists and the inculcation of general and individual education and prophylaxis."

S. H. Kennedy's Extract of Pinus Canadensis.

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Our Duty to the Public.

The doctors of Alabama are or should be among the respected leaders of thought in their several communities. They are especially concerned in all that pertains to the general public welfare which leads to social betterment along all the lines of civil economy. To this position when worthy they are entitled and it becomes their duty at all times, apart from mere partisan politics, to endeavor to mould public opinion in the proper channels, that the wholesomeness and virtue of communal life may be kept pure and upright. They should on all occasions be found on the side of upholders of the majesty and dignity of the law and ready to vindicate

it with their best efforts. They thus become towers of strength and moral support in the integrity of affairs which often involve self abnegation and a running counter to public sentiment in their surroundings. No class of educated right thinking men should be more deeply interested in all matters of civil economy than those whose ordinary walk of life places them in easy position to ascertain how the true and the good, quietly and unobtrusively may win victories that shall mould public opinion to its best and highest interpretation of civic purity. No man can properly hope to escape from the responsibility laid upon him as a living factor and entity. In the times that in all ages try the strength of character, let our prefession be in the foremost in upholding the true and good in all the ways of public duty. Aristotle says, "dignity does not consist in possessing honors but in deserving them." Where these honors are deserved let us do our part in placing them.

In the coming primary six Judges of the Supreme Court are to be nominated, a position of the highest dignity and honor and now sought after by a number of worthy and competent men. Among these men are two who in the past have in their legislative capacity been of great service to the medical profession of the State in their efforts to advance all public sanitary interests for the benefit of the commonwealth, and whose services have been given in years gone by without any thought of self-interest or aggrandizement. It is no more than fitting that in their aspirations they should be encouraged by the unanimous support of the medical profession of Alabama with all its influences. We refer directly and without any disparagement to the other noble men who seek this position—to Simpson of Florence and Callahan of Morgan. They are men of pure and worthy character and eminently fitted to adorn the highest judicial positions. As a profession we can make no mistake in advancing their interests.

The Medical Association of the State of Alabama.

The Medical Association of the State of Alabama will hold its next annual meeting in the city of Mobile, commencing on Tuesday, April 19th, at 12 o'clock noon, and will continue in session for four days.

DUTIES OF COUNTY SOCIETIES.

County Societies are entitled to representation by TWO (2) DELEGATES. Each delegate pays a fee of $5.00, which gives the privilege of participating in all the proceedings of the Association, and of voting. Each County Society is URGENTLY requested to send ITS

FULL COMPLEMENT OF DELEGATES. To secure this end, it is suggested that the County Society defray a part of, or the whole of, the expenses of its delegates.

Each County Society is required by the Constitution of this Association to send in an ANNUAL REPORT, embracing the following items:

FIRST—The revised register of the County Society, and of the practitioners of the county who are not members of the Society. Great care must be had in the preparation of this register. Be sure to give in full the following points: Arranging both members and non-members in alphabetical sequence.

(a) Name in full.
(b) College, and date of graduation.
(c) Date and county from which certificates were received.

In the event of the death of a member, show the following:

(a) Name in full.
(b) Date of death, and cause.
(c) College, and date of graduation.
(d) Brief sketch of his life and labors.

SECOND—A full account of the work of the Society, number of meetings held, etc.; average attendance, papers read, etc.

THIRD—An account of the work done by the Board of censors—as Censors—as a Board of Medical Examiners, and as a Committee of Public Health.

It is suggested that the Secretary of each County Society prepare AT ONCE his register and report, and that he read it before the Society at its next regular meeting. Much error may, in this way, be avoided.

INSTRUCTIONS REGARDING TRANSPORTATION.

Purchase a first-class ticket (either limited or unlimited) to Mobile, paying full fare for same, and take, from the ticket agent, a receipt issued on properly prepared form. If through ticket can not be had from starting point, take a receipt from each agent from whom ticket is purchased. These receipts must be signed in Mobile by the SECRETARY, and also by G. W. KING, CITY TICKET OFFICE, MOBILE & OHIO R. R.

Upon presentation of receipt to the TICKET AGENT, return fare may be had for ONE-THIRD REGULAR FARE, PLUS 25 CENTS.

The wives and families of members may also enjoy this privilege of reduced rates.

Below is a list of the regular reporters, and a partial list of the volunteer papers:

REGULAR REPORTERS.

Jerome Cochrane Lecture—William S. Thayer, M. D. Baltimore, Md.

Monitor's Address—Thomas D. Parke, M. D. Birmingham, Ala.

Cranial Injuries, With Report of cases—William Henry Robertson, M. D., Clayton, Ala.

States' Rights—McLean Pitts, M. D., Selma, Ala.

Intra-tracheal Injections in the Treatment of Pulmonary Tuberculosis, With Reports of cases—William Weightman Mangum, M. D., Eufaula, Ala.

Operative Treatment of the Patella, and of Certain Fractures of Long Bones—William Mudd Jordan, M. D., Birmingham, Ala.

Puerperal Sepsis—Its Prevention and Treatment—A. LaFayette Harlan, M. D., Alexander City, Ala.

A Study of the Blood in Uncinariasis—William Groce Harrison, M. D., Talladega. Ala.

Ex-Opthalmic Goitre—Edward Powell Riggs, M. D., Birmingham, Ala.

Nervous Diseases in Alabama—Eugene DuBose Bondurant, M. D., Mobile, Ala.

Hemorrhage an Important Element in Surgical Work—Frank E. Pettey, M. D., New Decatur, Ala.

Abdominal Hysterectomy for Fibroid Tumors of the Uterus—George H. Noble, M. D., Atlanta, Ga.

Psychic Impressions as a Therapeutic Agent—Stephen Cary Henderson, M. D., Brewton, Ala.

Pure Drinking Water for Country Homes, and for Villages and Towns Unprovided With Water Works—Edgar B. Kay, University of Alabama.

Retro-Displacements of the Uterus—Cunningham Wilson, M. D., Birmingham, Ala.

Carcinoma of the Kidney—Joseph Whitehead Peters, M. D., Birmingham, Ala.

The Practical Value of the Leucocyte Count in Inflammatory Conditions Within the Abdomen—Barney Burns Rogan, M. D., Selma, Ala.

Otoliths and Their Functions—G. Hartung, M. D., Cullman, Ala.

Surgery of the Arteries—Rudolf Matas, M. D., New Orleans, La.

The Importance of Early Diagnosis and Treatment in Suppuration of the Middle Ear—Charles Alston Thigpen, M. D., Montgomery, Ala.

Intractable Cases of Dyspepsia, Indicative of Chronic Lesions of Stomach, Curable by Operation—W. H. Haggard, M. D., Nashville, Tenn.

Mental Abnormalities—James T. Searcy, M. D., Tuscaloosa, Ala.

Some Phases of Crime as Viewed from a Medical Standpoint—S. G. C. Pinkney, M.D., Atlanta, Ga.

Intestinal Obstruction Due to Meckel's Diverticulum—J. Norment Baker, M. D., Montgomery, Ala.

VOLUNTEER PAPERS.

Typho-Malarial Fever—W. F. Betts, M. D., Evergreen, Ala.

Amoebic Dysentery—Charles W. Franklin, M. D., Union Springs, Ala.

Differentiation Between Glaucoma and Cataract—Louis Edelmar M. D., Mobile, Ala.

Valvular Disease of the Heart—L. W. Johnson, M. D, Tuskegee, Ala.

The Doctor's Business Side of Life Insurance—E. H. Sholl, M. D., Birmingham, Ala.

Pelvic Cellulitis—Isaac LaFayette Watkins, M. D., Montgomery, Ala.

Gas and Ether in the Production of General Anaesthesia—Samuel A. Billing, M. D., Montgomery, Ala.

Subject to be Supplied—George Heustis Fonde, M.D., Mobile, Ala.

Mobile.

On the 19th of next month the Medical Association of the State of Alabama will convene in this beautiful city. A large attendance is reasonably expected, because the medical profession throughout the State is always delighted to visit the city of Mobile. It is an interesting and attractive city, and the further fact that the members of the medical profession of Mobile always exert themselves to make the visiting doctors have a pleasant and profitable time.

For big-hearted, whole-soul hospitality, the older members of the profession of Mobile have always been noted. The younger members of the profession are wide awake and progressive, keeping abreast with all the improvements and advancement in medical science, and the generous interest which they take in their medical brethren is worthy of note.

The Journal insists that every physician in the State of Alabama, who can possibly leave home, should do himself the pleasure of enjoying a few days' outing, away from his work on this occasion, and attend the meeting at Mobile.

The Ethics of Eating.

The influence of the mind over the body is perhaps nowhere better illustrated than in the relation between psychic conditions and digestion. We recently emphasized the value of the deliberate and thorough mastication of food, and took occasion to say that how one eats is often of more importance than what one eats. In the treatment of dyspepsia, it is important to secure freedom from anxiety, pleasant surroundings and such other accompaniments as conduce to enjoyment in eating. Pawlow's classical experiments on gastric secretion in dogs led him to some important conclusions on this subject. One of them is that food eaten without relish and without appetite, although in itself most nutritious and supposedly easy of digestion, may remain for hours in the stomach undigested. The same result often follows when food is eaten while the mind is diverted to other things, especially in case of anger, anxiety, preoccupation, etc. Pawlow says that the old and imperative requirement that food should be eaten with interest and enjoyment is the most emphasized and strengthened of all of his conclusions. Thus food which is nutritious and of the best quality may remain undigested because it lacks presentation in an attractive form or is served amid unpleasant surroundings. Pawlow even says a good word for the preliminary cocktail or the use of some alcoholic in small amounts, as these, by producing slight exhilaration, divert the mind from unpleasant surroundings, and may enable one to forget cares and worries. It is hardly necessary to suggest, however, that this remedy may be more harmful than otherwise. But the enjoyment of eating is the important factor, and of many harmless means to secure this end, it matters little which means is used provided the end be secured. It is well to call attention again to this well known fact; here is the solution of many an indigestion problem, especially among business men in cities. The psychologic factor in this important function is not to be forgotten.—J. A. M. A.

TO EXPERIMENT WITH SMALLPOX GERMS.

The Harvard Medical School has recently sent out on a unique expedition W. R. Brinckerhoff and E. E. Tyzzer, who go from the school to Manila. A fund has been raised by private subscription for their studies. About $6,000 will be spent by them in the coming year. This money was given in recognition of Dr. Councilman's recent discovery. Monkeys are plentiful and cheap in the Philippines, and the United States authorities there are not antivivisectionists. The government has guaranteed that the two doctors shall have every possible facility for their work.

Society Reports.

CLINICAL SOCIETY OF THE NEW YORK POLYCLINIC MEDICAL SCHOOL AND HOSPITAL, STATED MEETING, HELD FEBRUARY 1, 1904.

THE PRESIDENT, DR. JAMES HAWLEY BURTENSHAW, IN THE CHAIR.

GASTROPTOSIS.

Dr. W. V. V. Hayes showed a patient, a woman thirty-eight years of age, who first came under his observation three years ago, suffering from gastroptosis. She gave a history of severe gastric pain, which ran through to the back, coming on after eating and lasting for two or three hours. She vomited frequently, and was unable to obtain relief until the stomach was empty. Eructations of gas, anorexia and constipation were marked symptoms. The stomach, on examination, proved to be sensitive to the touch, and was displaced downward about the width of three fingers, as shown by the position of the lesser curvature. The functional signs revealed an adenasthenia gastrica, there being no free HCL and a total acidity of only 20. Tincture of nux vomica and fluid extract of condurango were administered. (Incidentally, in the course of treatment, she was relieved of a tape worm). The Vanvalzah-Nisbet bandage was applied to the abdomen. This bandage reverses the action of the ordinary corset and pushes the stomach upward and backward. Occasionally the use of a supporting bandage produces a decided change in the position of the stomach, but ordinarily this can hardly be expected. There was a distinct improvement in the condition of the patient. She had gained several pounds in weight, which doubtless helped to keep the stomach in better position. Her general condition was much improved, and there had been practically no symptoms for three months. The supporting belt was no longer required.

She was given solutions of bicarbonate of soda and tartaric acid, about a minute apart, to demonstrate the improvement in the position of the organ, which was found to be two fingers' breadth higher than when originally observed.

ATROPHIC GASTRITIS.

This patient, a man fifty years of age, was also presented by Dr. Hayes, who first saw him in 1897. The patient then gave a history of having suffered for about a year from vertigo, nausea, regurgitation of food and expulsion of gas three hours after eating; his appetite was poor, and there was a tendency to diarrhoea and extreme

nervousness. He had been moderately addicted to the use of alcoholic drinks, and had taken large amounts of strong medicines. He was treated for syphilis in 1890-1891. Analysis of the stomach contents during the past six years gave practically the same results. The total acidity ranged from 6 to 10. No free hydrochloric acid was found. Ferments were absent, but mucus was always present. The condition was one of atrophy of the mucus membrane. The speaker said that there had been very little change in the condition of the patient and there would probably be very little, so long as the motor function of the stomach was retained and the intestinal compensation maintained, but if these should fail, very little could be done to help him. During the six years the stomach had practically done nothing except to pass the food onward. This patient demonstrated how a person with atrophic gastritis may live for a long time in comparatively good health.

Dr. Morris Manges opened the discussion of the second patient presented by Dr. Hayes. He called attention to the statement which had been made in the presence of the patient that large quantities of the iodides which the man had taken were probably responsible for the atrophic gastritis. The speaker said that in his opinion atrophic gastritis was one of the most complex and least understood of all diseases of the stomach. There is no positive evidence as to whether it comes from the mucosa or the submucosa further down. It is known that cases of pernicious anemia exist and are associated with atrophic gastritis. The exact pathological classification is unknown. As regards the influence of strong medicines in the causation of gastritis, it may occur as well in the late stages of alcoholism, but that is an entirely different picture. Atrophic gastritis is largely due to changes in the portal circulation, secondary to changes in the liver itself, and there is a clear distinction in the etiological elements of the cases, and subsequent changes has nothing whatever to do with the disease. Many syphilitics have had larger doses of iodides than the patient under discussion, and no atrophy resulted, but the patients derived the greatest benefit from this medication. The speaker said he prescribed for all cases of atrophic gastritis 5 to 7 minims of hydrochloric acid at each meal, for the remainder of their lives, and thought that this treatment and the motility of the stmoach were the chief factors in the disease.

DERMOID CYST.

Dr. James P. Tuttle showed a very unusual specimen of a dermoid cyst. There was practically no history until the day previous to the operation, when the patient, a girl about eighteen years of age, went

to the office of her family physician and complained of difficulty in making her bowels move, and excessive pain when they did move. She was given an enema and a laxative. The next morning she had a chill. Examination then revealed a tumor in the left inguinal region about the size of a small orange. Her temperature was about 100 degrees F. Three hours later the tumor had apparently increased about two-thirds in size, and the girl's temperature was 102 degrees F. Dr. Tuttle was called in consultation and found her with a temperature of 102 degrees F., inability to move her bowels, and a fluctuating mass in the left giliac region and in the recto-sigmoidal juncture. His diagnosis was hematoma. The following day her pulse was faster and there seemed to be hemorrhage, so the vagina was opened through the posterior cul-de-sac, and about six ounces of clear, serous fluid was evacuated. Passing his hand further up, a large tumor was found, and the operator, supposing it to be an abscess, poked his finger through a rent in the apparent capsule, and fluid gushed forth, which, on bacteriological examination, proved to be filled with fat. Inside the capsule was a tumor, which was removed through the vaginal opening. On one side of the tumor were four protuberances, just in line. This mass, which was on the left side was attached by a pedicle to the posterior surface of the right lobe of the liver. The tumor had apparently been lying in the posterior cul-de-sac, and the hemorrhage pushed the tumor up to the position in which it was found at the time of operation.

Dr. J. Riddle Goffe said that Dr. Tuttle's specimen was a remarkable one. These masses are commonly found in connection with the ovaries, and the more he thought of the development of a dermoid teratoma, the more inclined he was to believe that it was necessary for some form of degenerate conception to have occurred previous to their development. However, in the specimen under discussion, this was probably not true, as the patient was a young girl, and Dr Tuttle said that both ovaries were present and absolutely undisturbed. It seemed that one might trace a faint outline of a fetal mass, the larger projection at the top of the mass representing the head, two projections lower down for the shoulders and arms, and two at the other end for the lower extremities.

VESICAL CALCULI.

Dr. E. L. Keyes, Jr., presented a large number of specimens of vesical calculi, and gave a most interesting talk on the formation of these stones, the differences in their composition and appearance and the procedures by which they had been taken from various patients. He said that the first interesting feature about stone in the bladder

is the different varieties that occur and the manner in which they may be distinguished from each other. If the bladder is opened and the specimen taken out whole, the stone presents one picture, and it is crushed and sucked out through the urethra, the picture differs. The first specimens shown represented stones under the two forms.

The first distinguishing characteristic of these calculi is that they are either primary or secondary. The primary stone forms itself for no reason that can be recognized; the secondary stone is formed by the inflammation produced by the primary stone. While there are a great many different varieties under either head, the chief groups are the oxalate of lime stone, the uric acid stone, and the urate of soda stone. There are many kinds of secondary stones, but they are all modifications of one mixed mass of the various phosphates, and are known as mixed phosphates stones. Among 150 stones, all of which had not been examined chemically, the speaker said that as far as he knew, all were included in one of these four classes.

Specimens were shown representing four different varieties of stone under two different guises. Some were composed of oxalate of lime, and were very irregular in shape. For this reason they are sometimes known as mulberry stones. The color is not very clearly brought out, but they vary in shade. A urate stone shown at the same time was distinctly lighter in color than the mulberry stone, and the surface of the former was much more regular, but not entirely smooth. The phosphatic stone is smoother and somewhat resembles white agate in appearance. In the crushed specimens the color is much the same as in the whole stones, but is more distinct. The primary stones are all distinctly darker than the secondary phosphatic stones. Very frequently uric acid and urate stones are mixed in one deposit. Both have a distinctly reddish hue, as compared with the brown of the oxalate.

A point worth noting is that the secondary stone sometimes forms as the result of inflammation caused by the primary stone; consequently in many secondary stones the beginning is primary, and the primary stone rolls about in the bladder, cystitis results, and changes occur in the alkaline urine, which throws out phosphates which are deposited on the primary stone. The speaker showed one stone which had existed for many years as a primary stone before it developed a phosphatic covering. The proper bacteria were not present to render the urine alkaline; a cystitis must have been present for many years before it became alkaline. Another specimen was an oxalate stone through which peaks of oxalate showed through the deposit of phosphatic covering. One great English authority, Dr. Morris, places the

percentage of uric acid kidney stones as high as 95 per cent., in other words, of the many phosphatic stones removed from patients, the greater number are formed under nuclei of uric acid stones.

The speaker next showed the largest stone in his collection, which was taken from a man thirty-six years of age. The stone had existed for thirty-five years when the patient went to Bellevue Hospital in 1860. A diagnosis of cancer of the bladder was made, and he died without an exploratory operation, exploratory laparotomies not being as common then as now. At the autopsy a stone thirteen ounces in weight was discovered, which was unquestionably the cause of death. The interior of the stone is oxalate, covered by layers of phosphatic deposit. In the oxalate stone the outside and inside are "bumpy," so to speak, and there is no regular formation, while in a uric acid stone in the collection there are systematic thin layers, one upon the other.

The shape of a calculus is sometimes interesting, but not important, perhaps. The stone generally takes the shape of the cavity in which it lies, in a general way. All the stones are concentrically formed. There is a nucleus of what may be termed a "foreign body"—either an actual foreign body or formed from the salts of uric acid. Layers of the same substance or of a new substance keep forming, and in a general way there is a roundish shape, with the exception of the oxalate stone, in which, in certain cases, the nucleus is not central. The speaker showed several stones which had formed upon nuclei of actual foreign bodies. One or two had formed upon the ends of catheters which had broken off in the bladder, and one especially interesting specimen which had formed on the end of a hair. The patient developed a tumor with a hairy surface, and the inflammation thus set up caused a cystitis with alkaline secretion, and phosphates were thus deposited on the hair. There were thirty-one small stones, each formed in the same manner, at the end of a hair.

Dr. Charles H. Chetwood presented two specimens of vesical calculi which he thought of special interest in connection with the general consideration of the subject by Dr. Keyes. The first specimen presented had been removed from a three-year-old child about a week previously in the clinic. The size and compactness of the specimen were such that he thought it probably a fetal formation. The diagnosis was made with a silver probe, with which he touched the stone without difficulty. A suprapubic incision was made and the stone removed. It weighed 5.44 grammes. The patient has a suprapubic fistula, which the speaker thought would heal in a few weeks. The

other stone formed upon a broken off catheter, and was removed from a patient seventy-two years old who had an enlarged prostate. It weighed 10.44 grammes and was composed of triple phosphates and ammonion urate. The catheter nucleus was broken off in the bladder some three years before the calculus was removed.

CYSTIN CALCULUS.

Dr. Manges showed a cystin calculus which he thought particularly interesting because there are probably not more than fifteen specimens in the entire world. The stone, which weighed fifty grains was passed spontaneously by a boy twenty years of age. The patient disappeared, so that no chemical analysis could be made. These stones are closely associated with a putrefaction which goes on in the intestines and are excreted in the urine as well. This disease often occurs in families, but the chemical analysis is unknown.

Dr. Manges showed two specimens of renal calculus, and the kidneys from which they had been taken. A patient who was operated on for the relief of difficulty in secretion of urine died, and upon examination it was found that extreme atrophy of the kidney had resulted from the impaction of a stone in that organ.

The second specimen was a very good demonstration of the stone in situ. A very large kidney had been packed with stone, which had in time caused a hydronephritis. At the lower end of the specimen, part of the kidney could be seen beyond the pelvis, showing what extensive changes may be produced by the long residence of stone in the kidney.

X-RAY DEMONSTRATION OF STONE IN THE URETHRA.

Dr. Albert Kohn presented an X-ray photograph of a patient who had suffered from attacks of colic for fifteen years. His symptoms were relieved by hypodermic injections of morphin. After one of these attacks he had a chill, and the diagnosis of "surgical kidney" was made and a surgeon called. The patient was removed to a hospital, where he could be watched for confirmation of the diagnosis, and three days afterward he developed a second attack and one week later a third attack. An exploratory incision was made into the kidney, and no stone was found, but there was an acute infection. This wound was barely healed when the patient had another attack of colic, followed by a chill. The surgeon went in from below and catheterized the ureter and found what he thought was a stricture. The patient was sent to have an X-ray photograph taken and fortunately the stone lay directly in line with the photograph. The surgeon cut down on the ureter and removed the stone.

RENAL CALCULUS.

Dr. J. Riddle Goffe presented a specimen of renal calculus removed by him from a woman aged forty years, who was sent to him for operation for ovarian cyst. She had suffered from severe pain, from chills and fever, for about six months, and was treated for malaria. Her urine had been examined several times and no pus had been found. Upon examination it was found that she had a large tumor, which had no connection with the pain, and upon opening the kidney a large stone was discovered, which blocked the passage. It was removed without difficulty and without opening the ureter.

The speaker said that the specimens of calculus growing upon the end of a hair, showed by Dr. Keyes, recalled to his mind a patient, female, aged forty-five years, who, several times a year, plucked tufts of gray hair from her anus. It always reappeared in a few months. She had a tumor, and on operating a large dermoid cyst was found, and over the pelvis it had lacerated through the rectum and the rectum had closed around it. This was the origin of the tufts of hair.

Dr. F. M. Jeffries said it is impossible to give a definite explanation of the etiological factors in the formation of these calculi. A number of theories have been advanced. One thing is certain; three factors must be present before calculi can be formed: 1. The chemical constituents of the urine. 2. Nidue. 3. A substance capable of entering into and making a stroma. It is true that two substances at least manifest in themselves a cohesive power, as seen in the uric acid of roseate crystals and in calcium oxalate where the crystals are found in rare spherical and dumbbell shapes. The reaction of the urine will control the kind and variety of stone that is formed, an acid urine allowing only those to form that are insoluable in the acid, and an alkaline urine causing those that are insoluable in alkaline. As regards the nidus, Dr. Keyes had shown a number of specimens in which it was crystal; what forms on that afterward depends on what takes place in the bladder. One substance which Dr. Keyes did not mention, which is sometimes found forming the nidus, is a blood-clot. A peculiar feature regarding the formation of calculi is that they are particularly liable to occur in particular, definite, fixed localities, while territories in the close vicinity may leave their population comparatively free from this affliction. This led to a strong opinion that the variety of waters might have something to do with their formation, but investigations on this line have not thoroughly satisfied those who adhere to this theory.

SOME RECENT CASES OF EXTRAUTERINE PREGNANCY.

The January number of Maryland Medical Journal gives an account of the following cases, reported at a regular meeting of the Johns Hopkins Hospital Medical Society by Dr. Cullen. .He said that extrauterine pregnancy had recently been more frequent than usual, and probably many cases had been overlooked. The first patient was a woman of thirty years, who was nursing her child, and hence gave no menstrual history. The symptoms were pain in the side, absence of temperature and a palpable mass which was movable. She made a good recovery after operation. The second patient had no symptoms until a sudden collapse, and two similar attacks several weeks later. There had been no haemorrhage and no temperature. The pelvis was found full of blood. The third patient showed the classical symptoms of collapse, pallor, distention, haemorrhage and a palpable mass. The fourth and fifth cases were characterized by labor-like pains, and in the last patient of the series the diagnosis was somewhat difficult, because she was at the time nursing a ten months' old child, and the mass in the pelvis suggested a myoma.

DIFFERENTIAL DIAGNOSIS OF TYPHOID FEVER IN ITS EARLIEST STAGES.

W. C. Rucker (Am. Jour. Med. Sc., vol. 127, No. 1), says:

1. There is no single symptom on which alone an early diagnosis of typhoid fever can be made. It is only by careful consideration of the symptom-complex that a clinical diagnosis can be arrived at.

2. The most trustworthy, as well as the earliest, sign of typhoid fever is the presence in the circulating blood of the bacillus of Eberth.

3. The demonstration of the bacillus of Eberth in the blood is not beyond any fairly well-equipped laboratory.

4. The bacillus of Eberth is found in the feces later than in the blood, but with comparative ease. The presence of the bacillus typhosus in the feces is of great value as a corroborative sign.

5. The presence of the bacillus typhosus in the rose spots is a trustworthy sign, but has no advantages over the examination of the blood from other localities.

6. The serum reaction of Widal is seldom demonstrable during the earliest stages of typhoid fever. It is of value only in the higher dilutions.

Miscellaneous Notes.

We note with interest that the Fourth Annual Summer Course in Medicine of the Tulane University of Louisiana will begin May 2 and last six weeks. Descriptive Circular will be mailed on Application. Address "Summer Medical Course, Tulane University, P. O. Drawer 261, New Orleans, La."

A prominent physician of Cincinnati, says: "I am very well pleased with the results obtained from the use of Daniel's Conct. Tinct. Passiflora Incarnata. In a case of paralysis for which I had sought relief from various other remedies without success, I began giving Passiflora with the most pleasing results. As a nerve calmative it is without a peer. In a case of nervous breakdown I put the patient on Passiflora, beginning with teaspoonful doses. In a remarkably short time he regained his nerve-equilibrim, the medicine giving complete and refreshing rest to all the organs of the body. And most gratifying of all, its after-effects, unlike that of opium and the bromides, was tissue-making and healthful."

SHADOW AND SUBSTANCE.

Now that the cod liver oil season is in full swing and the large and growing demand for this article made more apparent by the great scarcity of pure oil, the profession is better able to realize the position occupied by Scott's Emulsion. Every winter there is introduced at least one new cod liver oil preparation and until the following spring every inducement is made to unload it upon the public.

This year has been no exception, despite the great scarcity of pure cod liver oil. It is by reason of this latter condition that the profession should be careful what it recommends and uses in the way of cod liver oil preparations that are not absolutely guaranteed. With cod liver oil selling at unheard-of prices the composition of some so-called emulsions, wines, extracts, etc., is likely to be far below the standard and comparatively worthless.

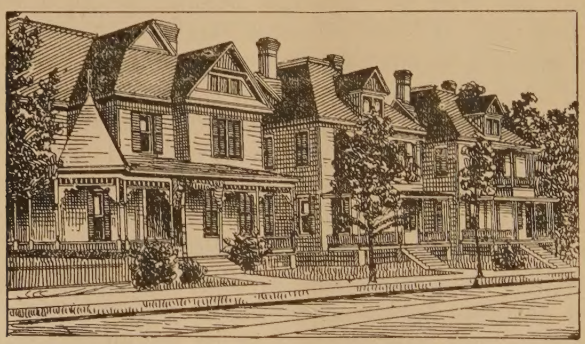
It has been a great protection to the profession to know that Scott'sEmulsion has maintained its position as the standard emulsion of cod liver oil during this unsettled time and that its quality and purity have not been changed in the slightest particular. Its popularity has never been menaced or its usefulness superseded by any of the hundreds of imitations that have come and gone since Scott's Emulsion was first offered for sale. Its success is due to the fact that it is the substance and not the shadow of cod liver oil.

FIRWEIN (TILDEN'S) IN TUBERCULOSIS.

Much has been written in late years about sanitarium and climatic treatment for consumption and there can be no doubt of the efficacy

of such treatment. Unfortunately the prevalence of tuberculosis is so wide-spread among the masses who are almost entirely dependent upon their own work or upon the meager income of the family for sustenance that unless the State steps in and provides free sanitaria in suitable locations it is useless to suggest this treatment for such sufferers. The toilers in our large cities affected with consumption cannot always leave their homes and shops to take up outdoor life and unfamiliar outdoor work, much of which would be beyond their strength to perform.

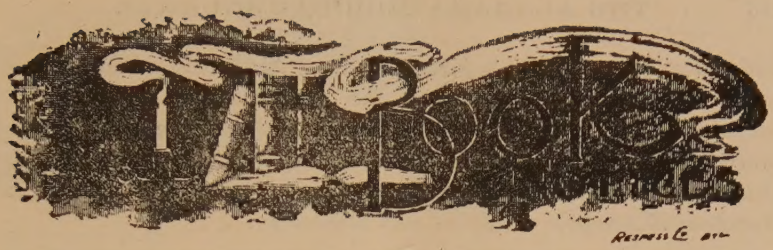
While it is important to impress upon these sufferers the importance of fresh air, by day and by night, and to encourage hygienic reforms which will tend to increase the resistance of the system against the ravages of the disease and to prevent its spread to the healthy, it should not be forgotten that Tilden's Firwein is one of the most potent remedies for all forms of tuberculosis. The suggestion of Cavazzoni that Iodine in tuberculosis acts not merely as a pulmonary antiseptic, but probably exerts an antitoxic actioa similar to that which according to Brunozzi and Luccesini, it exerts in typhoid fever, goes a long way to explain the demonstrated efficacy of Firwein as a remedy for consumption. Besides Iodine, Firwein (Tilden's) contains Bromide and Phosphorus held in solution by an elegant Wine of Fir, a product of the laboratories of the Tilden Company.



HIGHLAND PARK SANATORIUM,

I. L. WATKINS, M. D.,

MONTGOMERY, - - ALABAMA.



A TEXT-BOOK OF LEGAL MEDICINE AND TOXICOLOGY.

A TEXT-BOOK OF LEGAL MEDICINE AND TOXICOLOGY. Edited by Frederick Peterson, M.D., Chief of Clinic, Nervous Department of the College of Physicians and Surgeons, New York; and Walter S. Haines, M.D., Professor of Chemistry, Pharmacy, and Toxicology, Rush Medical College, in affiliation with the University of Chicago. Two imperial octavo volumes of about 750 pages each, fully illustrated. Philadelphia, New York, London: W. B. Saunders & Company, 1903. Per volume: Cloth, $5.00 net; Sheep or Half Morocco, $6.00 net.

This work presents to the medical and legal professions a comprehensive survey of forensic medicine and toxicology in moderate compass.

For convenience of reference the treatise has been divided into two sections, Part I and Part II, the latter being devoted to Toxicology and all other portions of Legal Medicine in which laboratory investigation is an essential feature. Under "Expert Evidence" not only is advice given to experts, but suggestions are also made to attorneys as to the best methods of obtaining the desired information from the witness. The Bertillon and Greenleaf-Smart systems of identification are concisely and inteliigently described, and the advantages of each stated. An interesting and important chapter is that on "The Destruction and Attempted Destruction of the Human Body by Fire and Chemicals;" for on the determination of the human or animal source of the remains frequently depends the legal conduct of a given case, and the guilt or innocence of the accused. A chapter not usually found in works on Legal Medicine, though of far more than passing significance to both the medical expert and the attorney, is that on the medicolegal relations of the X-Rays. The responsibility of pharmacists in the compounding of prescriptions, in the selling of poisons, in substituting drugs other than those prescribed, etc., furnishes a chapter of the greatest interest to every one concerned

with questions of medical jurisprudence. Also included in the work is the numeration of the laws of the various States relating to the commitment and retention of the insane. In fact, the entire work is overflowing with matters of the utmost importance, and expresses clearly, concisely, and accurately the very latest opinions on all branches of forensic medicine and toxicology.

THE TREATMENT OF FRACTURES.

Fourth Edition, Thoroughly Revised, Enlarged, and Reset.

THE TREATMENT OF FRACTURES: With Notes Upon a Few Common Dislocations. By Chas. L. Scudder, M. D., Surgeon to the Massachusetts General Hospital. Fourth Edition, Thoroughly Revised, Enlarged and Reset. Octavo volume of 534 pages, with nearly 700 original illustrations. Philadelphia, New York, London: W. B. Saunders & Company, 1903. Polished Buckram, $5.00 net; Sheep or Half Morocco, $6.00 net.

Four large editions of this work in less than four years testify to its value. The book is intended to serve as a guide to the practitioner and student in the treatment of fractures of bones. The student sees the actual conditions as they exist in fractured bones, and is encouraged to determine for himself how to meet the conditions found in each individual case. Methods of treatment are described in minute detail, and the reader is not only told, but is shown how to apply apparatus, for as far as possible, all the details are illustrated. This elaborate and complete series of illustrations constitutes a feature of the book. There are 688 of them, all from new and original drawings and reproduced in the highest style of art. Several chapters of special importance are those on Gunshot Fractures of Bone; The Rontgen Rays and Its Relation to Fractures; The Employment of Plaster-of-Paris, and the Ambulatory Treatment of Fractures.

In this fourth edition many new illustrations have been added, thus increasing the accuracy of this part of the work. The text has been thoroughly revised, thereby bringing the book absolutely abreast the times. X-ray plates of the epiphyses at different ages have been arranged. These will be found of value not only as an anatomical study but in the appreciation of epiphyseal lesions. An important addition is that of the chapter upon a few Common Dislocations. This chapter, like the rest of the book, is amply illustrated, and the accepted methods of treatment described.